

APPENDIX I: REAGENTS AND SOLUTIONS

184A1 medium

50ml MEGM

0.05µl 1mg/ml cholera toxin

25µl 10mg/ml transferrin

Agar plates

Add 1 packet of YT agar powder to 500ml distilled water.

Autoclave and cool to 55°C.

Add 50µl of ampicillin to the agar and swirl to mix.

Pour agar into petri plates and allow to set.

Wrap in foil and store at 4°C.

Bring to room temperature before use.

Agarose gel

1% agarose gel: 1g agarose in 100ml 1x TBE buffer

2% agarose gel: 2g agarose in 100ml 1x TBE buffer

Melt in microwave. When slightly cooled, add 3µl ethidium bromide and swirl to mix.

Pour into tray set with comb and allow to set.

Running an agarose gel

Fill gel tank with 1x TE buffer. Remove comb from gel and set tray in tank.

Load 1µl of 100bp DNA ladder with 5µl of 6x blue/orange loading dye, and 15µl of sample with 3µl of 6x blue/orange loading dye. Run gel at 100v.

Curcumin

Dissolve 0.02g curcumin to 10ml DMSO to make up a 5mM stock solution. Wrap tube in foil to prevent light degradation and store at -20°C.

Dilutions in 10ml DMEM/F-12: 25µM - 50µl stock solution

50µM - 100µl stock solution

75µM - 150µl stock solution

100µM - 200µl stock solution

HT-29 medium

49ml DMEM/F-12

1ml FBS

100µl 10 000U penicillin/ml and 10 000U streptomycin/ml

Store at 4°C.

Lycopene

Dissolve 0.03g of lycopene to 5ml THF/BHT to make up a 10mM stock solution. Wrap tube in foil to prevent light degradation and store at -20°C.

Dilutions in 5ml medium: 2µM - 1µl stock solution

5µM - 2.5µl stock solution

10µM - 5µl stock solution

20 μ M - 10 μ l stock solution

Filter sterilise dilutions before adding to cells.

MCF-7 medium

45ml EMEM

5ml FBS

100 μ l 10 000U penicillin/ml and 10 000U streptomycin/ml

Store at 4°C.

MDA-MB-231 medium

45ml DMEM/F-12

5ml FBS

100 μ l 10 000U penicillin/ml and 10 000U streptomycin/ml

Store at 4°C.

PBS

Dissolve 5 PBS tablets in 1l distilled water.

Autoclave and store at 4°C.

0.1mg/ml RNase A

1 μ l 25mg/ml RNase A in 250 μ l PBS.

Store at -20°C.

SAHA

Dissolve 0.01g of SAHA to 10ml DMSO to make up a 5mM stock solution. Store at -20°C.

Dilutions in 10ml DMEM/F-12: 1µM - 2µl stock solution

2.5µM - 5µl stock solution

5µM - 10µl stock solution

7.5µM - 15µl stock solution

Filter-sterilise dilutions before adding to cells.

10x TBE buffer

108g Tris-Cl (Sigma, Steinheim, Germany)

55g boric acid (Sigma, Steinheim, Germany)

9.3g EDTA (Saarchem Merck, Gauteng, South Africa)

500ml distilled water

Adjust pH to 8.3. Adjust final volume to 1l with distilled water.

10x TE buffer

12.11g Tris-Cl

5.72g EDTA

700ml distilled water

Adjust pH to 7.5 and make final volume to 1l. Autoclave.

Thalidomide

Dissolve 0.01g of thalidomide in 5ml DMSO to make a 10mM stock solution. Store at -20°C.

Dilutions in 5ml medium: 10µM - 5µl stock solution

30µM - 15µl stock solution

100µM - 50µl stock solution

300µM - 150µl stock solution

Transferrin

Dissolve 10mg of transferrin in 1ml Sabex water to make a 0.005mg/ml stock solution.

Store at -20°C.

APPENDIX II: FLOW CYTOMETRY RESULTS

The images were exported from the FACS Calibur software programme and as such the y-axis could not be visualised in the exported images. For the images to follow, the y-axis reflects “counts”.

HT-29/curcumin

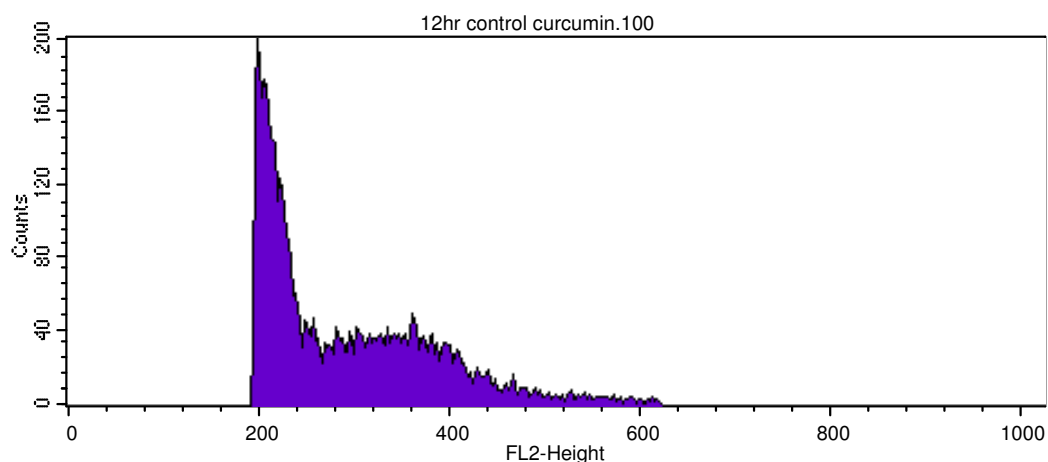


Figure 1: Histogram of HT-29/curcumin control cells treated with DMSO for 12 hours.

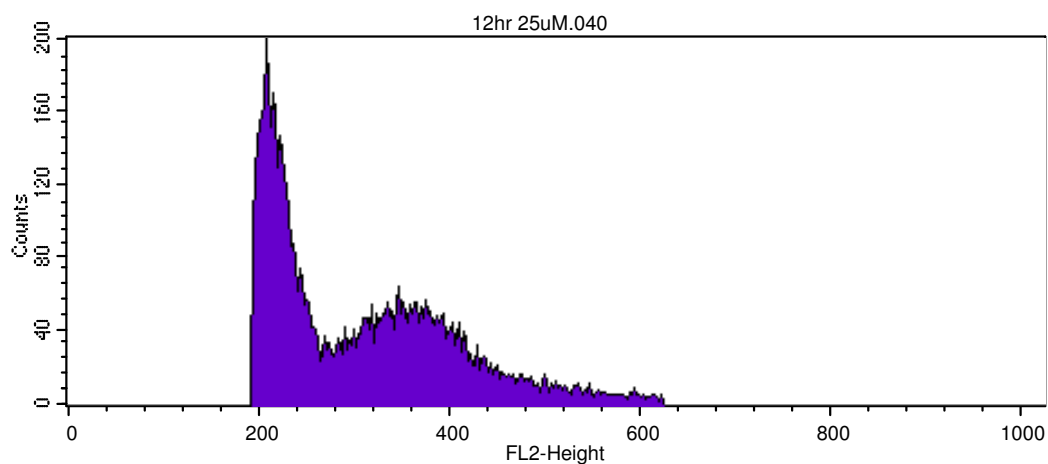


Figure 2: Histogram of HT-29 cells treated with 25µM curcumin for 12 hours.

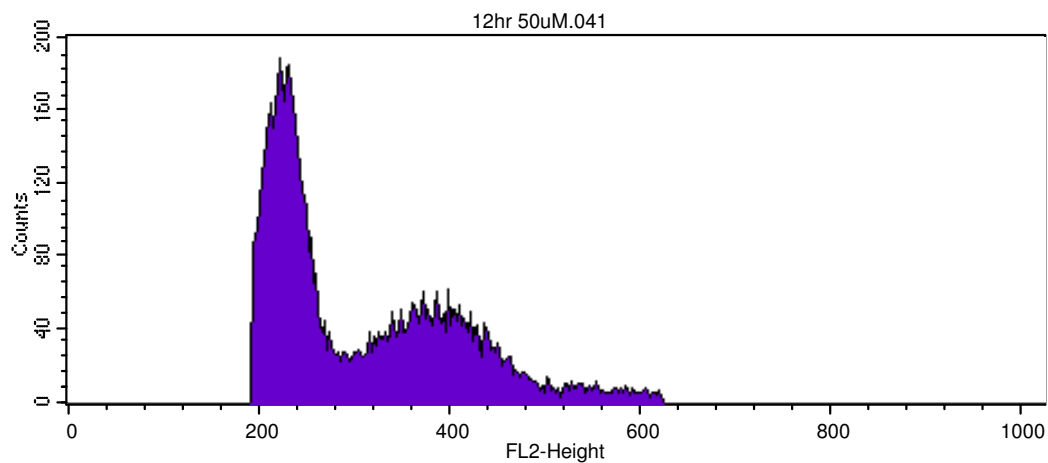


Figure 3: Histogram of HT-29 cells treated with 50μM curcumin for 12 hours.

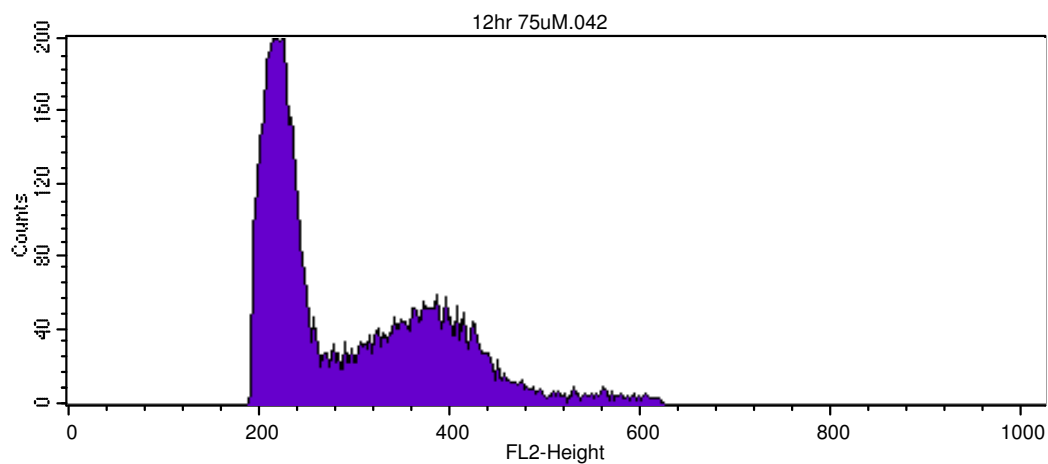


Figure 4: Histogram of HT-29 cells treated with 75μM curcumin for 12 hours.

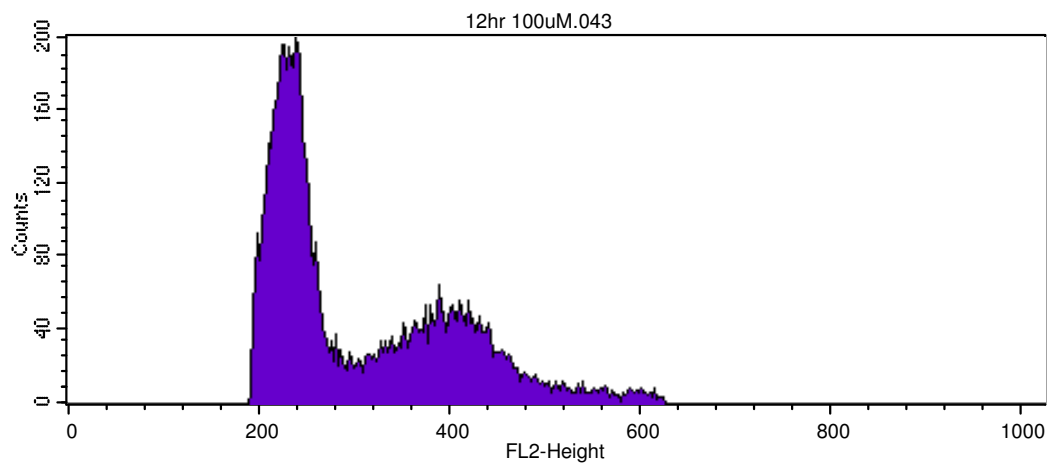


Figure 5: Histogram of HT-29 cells treated with 100µM curcumin for 12 hours.

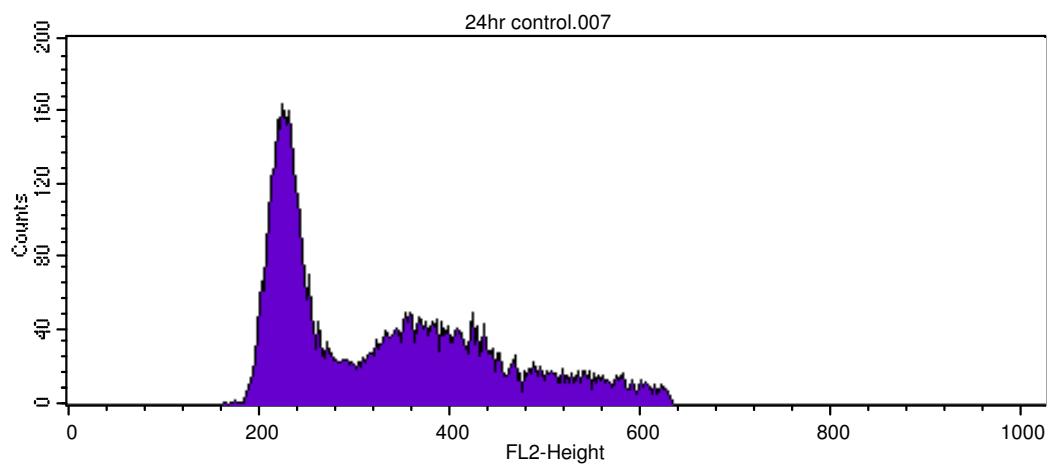


Figure 6: Histogram of HT-29/curcumin control cells treated with DMSO for 24 hours.

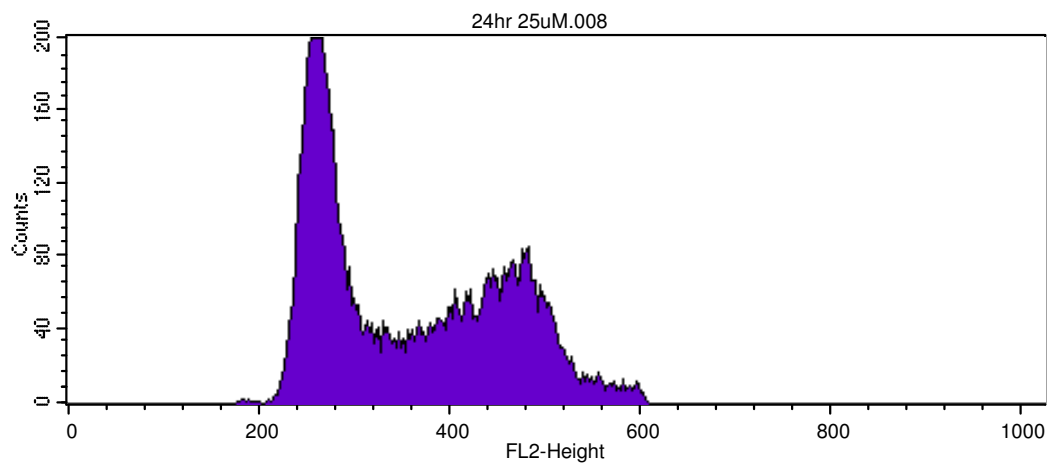


Figure 7: Histogram of HT-29 cells treated with 25μM curcumin for 24 hours.

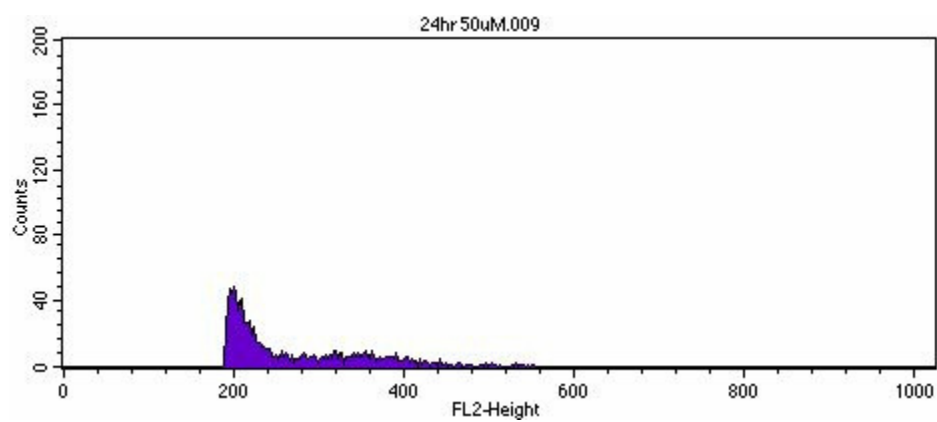


Figure 8: Histogram of HT-29 cells treated with 50μM curcumin for 24 hours.

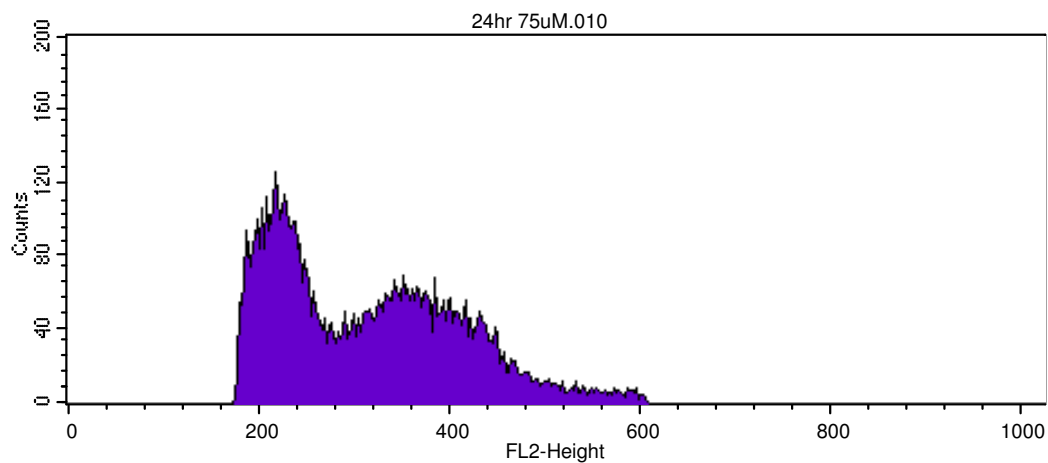


Figure 9: Histogram of HT-29 cells treated with 75μM curcumin for 24 hours.

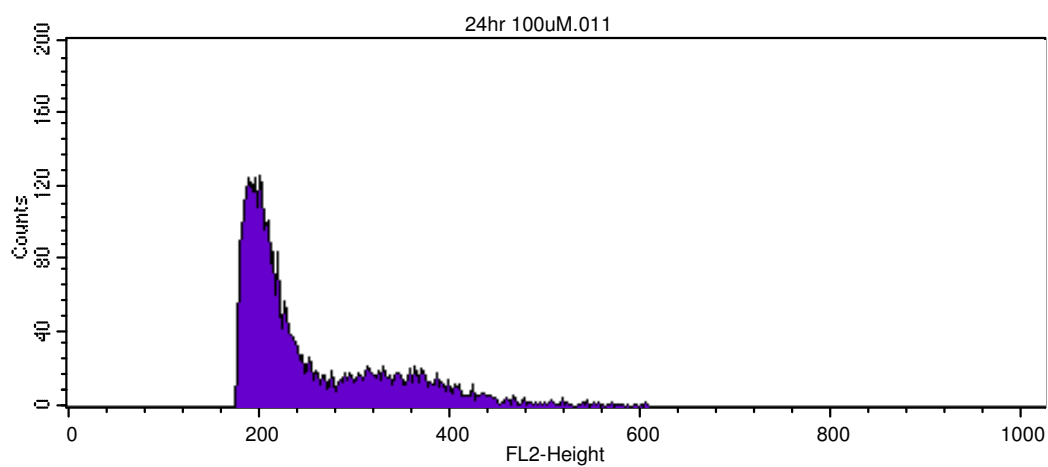


Figure 10: Histogram of HT-29 cells treated with 100μM curcumin for 24 hours.

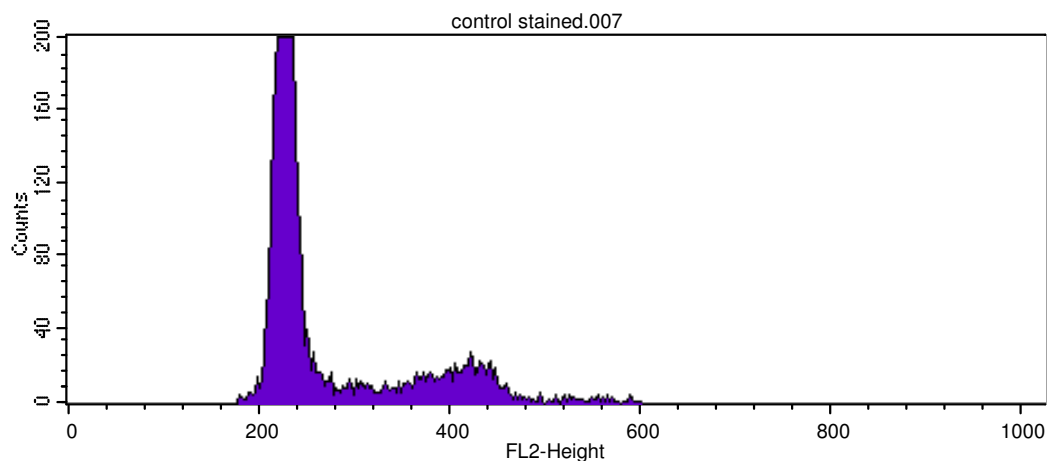


Figure 11: Histogram of HT-29/curcumin control cells treated with DMSO for 48 hours.

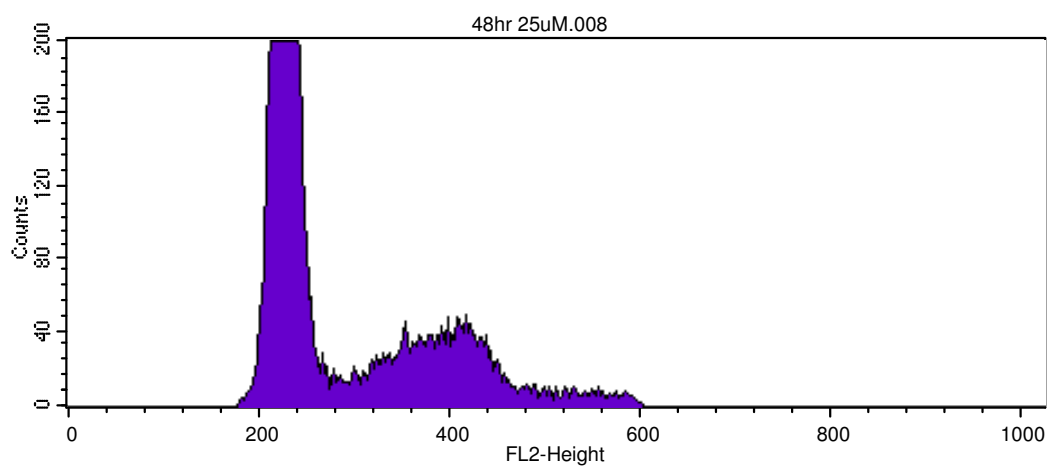


Figure 12: Histogram of HT-29 cells treated with 25 μ M curcumin for 48 hours.

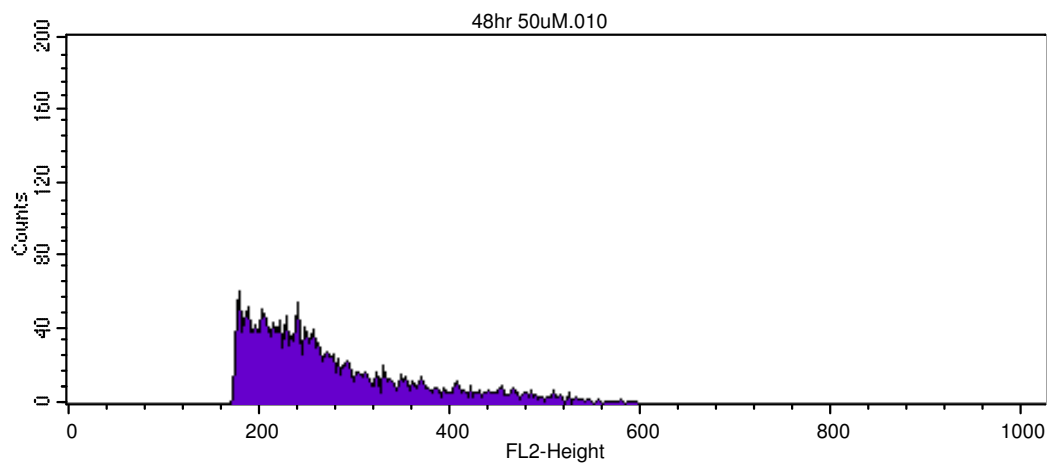


Figure 13: Histogram of HT-29 cells treated with 50μM curcumin for 48 hours.

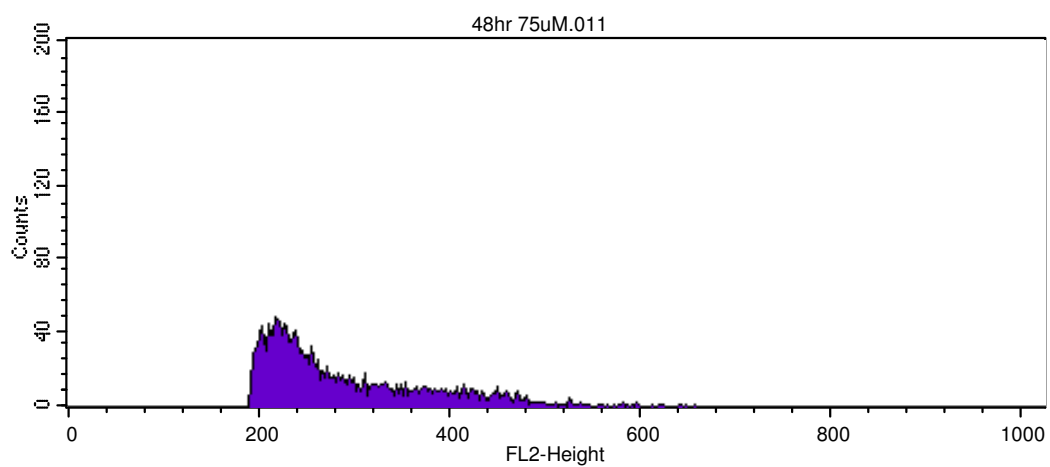


Figure 14: Histogram of HT-29 cells treated with 75μM curcumin for 48 hours.

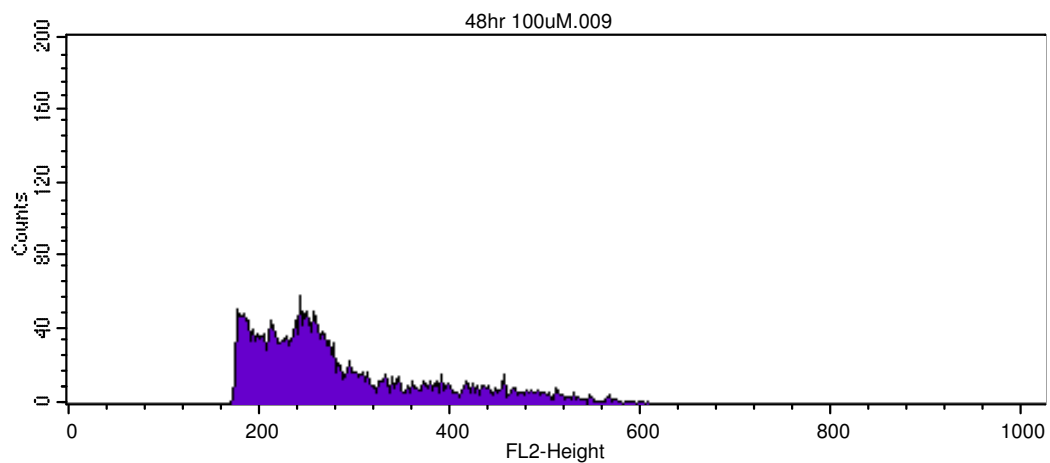


Figure 15: Histogram of HT-29 cells treated with 100μM curcumin for 48 hours.

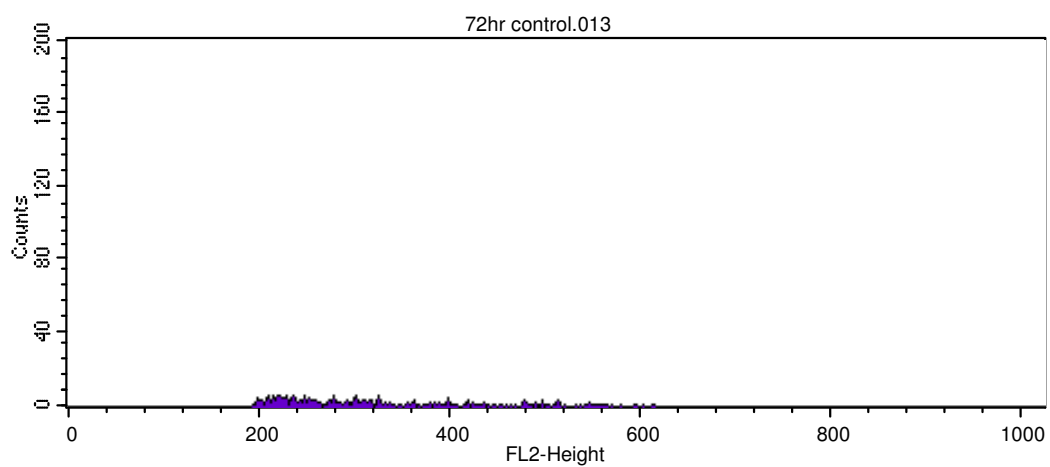


Figure 16: Histogram of HT-29/curcumin control cells treated with DMSO for 72 hours.

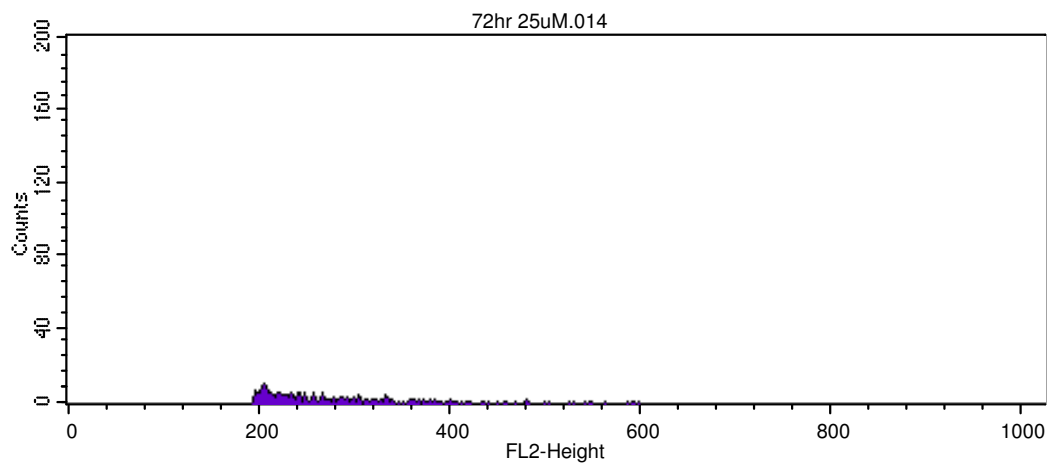


Figure 17: Histogram of HT-29 cells treated with 25 μ M curcumin for 72 hours.

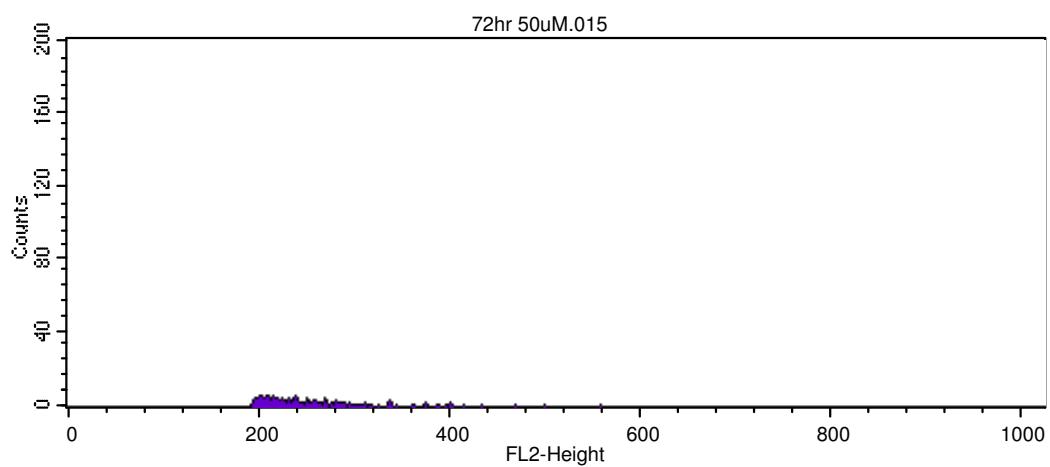


Figure 18: Histogram of HT-29 cells treated with 50 μ M curcumin for 72 hours.

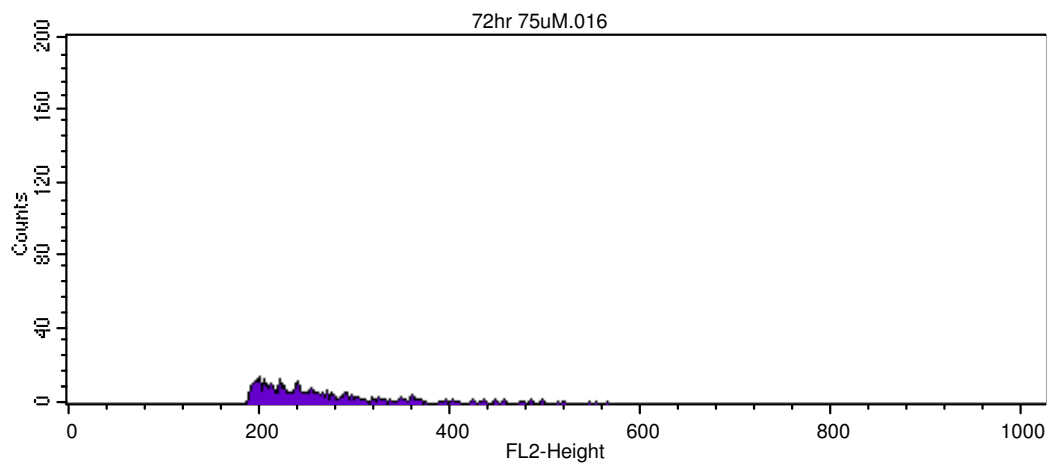


Figure 19: Histogram of HT-29 cells treated with 75 μ M curcumin for 72 hours.

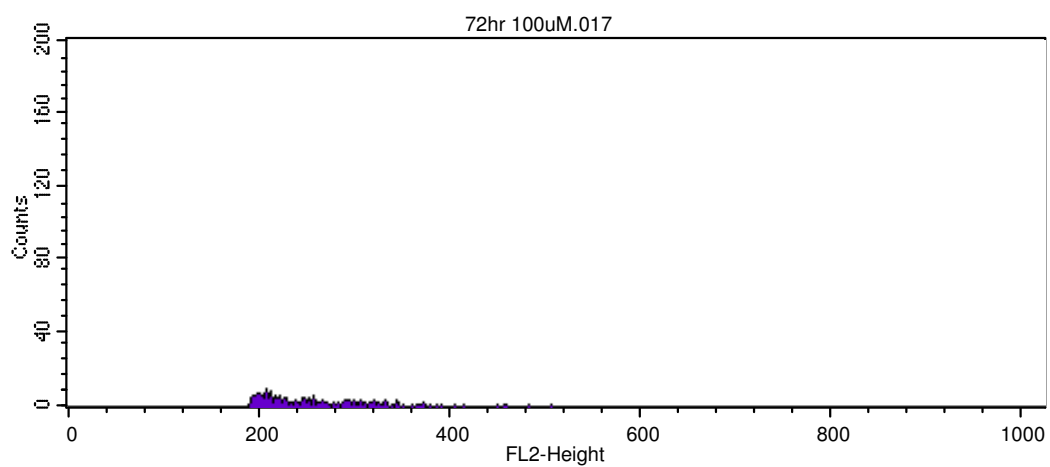


Figure 20: Histogram of HT-29 cells treated with 100 μ M curcumin for 72 hours.

HT-29/SAHA

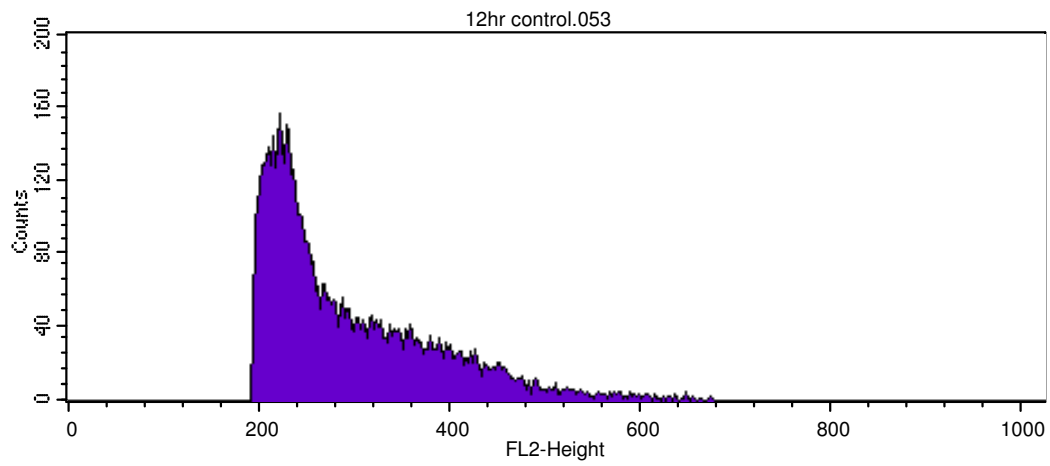


Figure 21: Histogram of HT-29/SAHA control cells treated with DMSO for 12 hours.

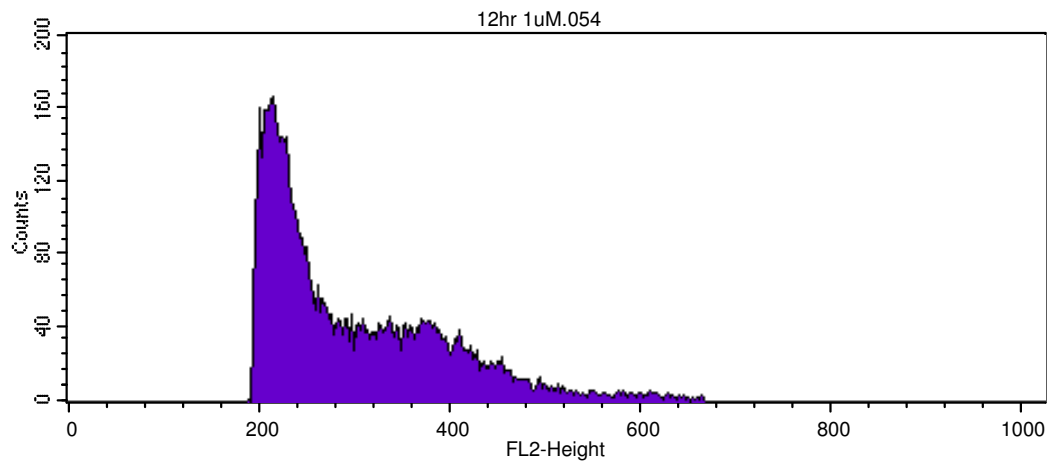


Figure 22: Histogram of HT-29 cells treated with 1 μM SAHA for 12 hours.

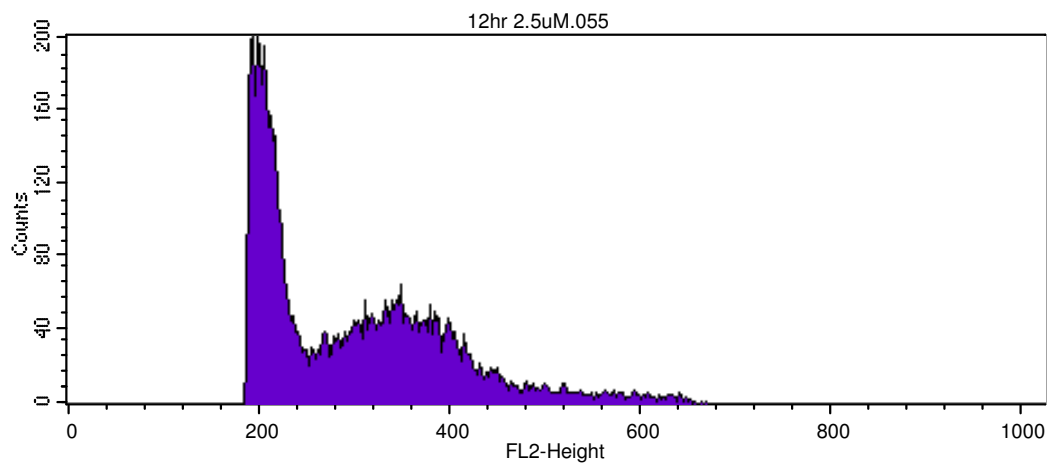


Figure 23: Histogram of HT-29 cells treated with 2.5μM SAHA for 12 hours.

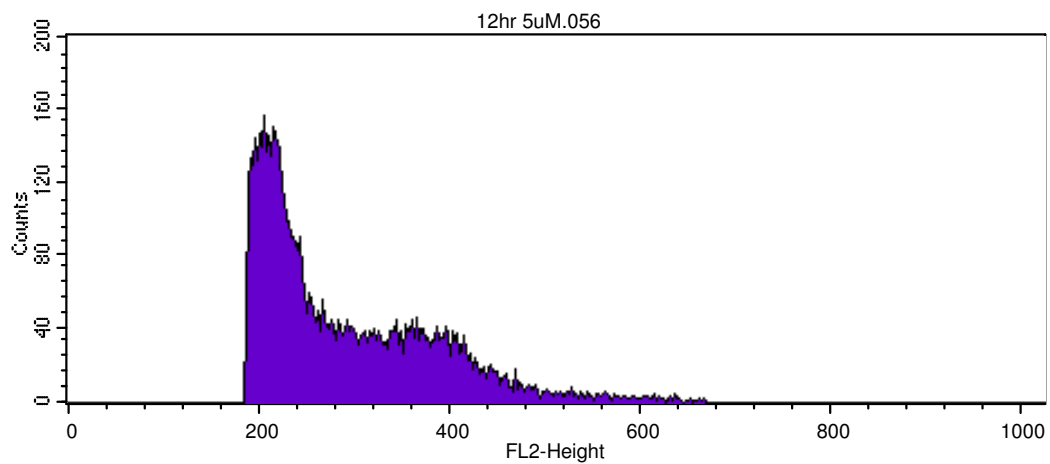


Figure 24: Histogram of HT-29 cells treated with 5μM SAHA for 12 hours.

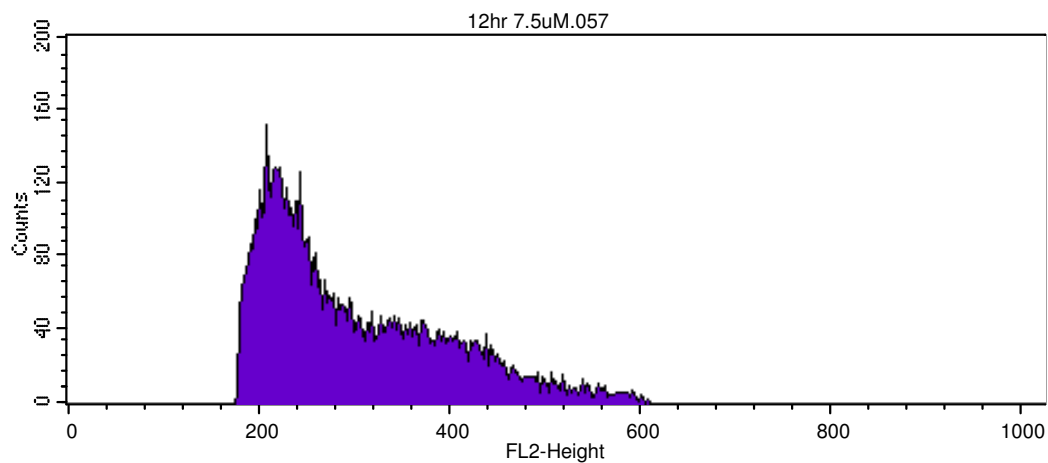


Figure 25: Histogram of HT-29 cells treated with 7.5μM SAHA for 12 hours.

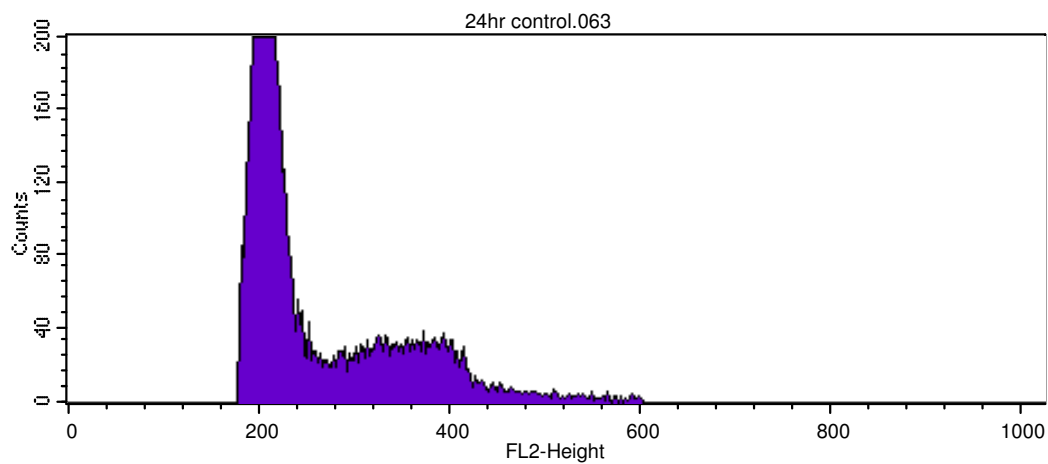


Figure 26: Histogram of HT-29/SAHA control cells treated with DMSO for 24 hours.

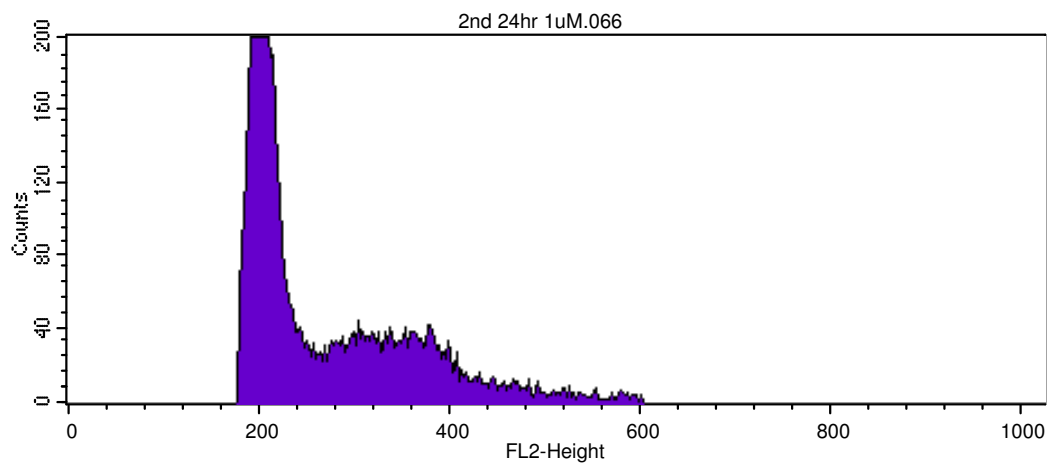


Figure 27: Histogram of HT-29 cells treated with 1 μ M SAHA for 24 hours.

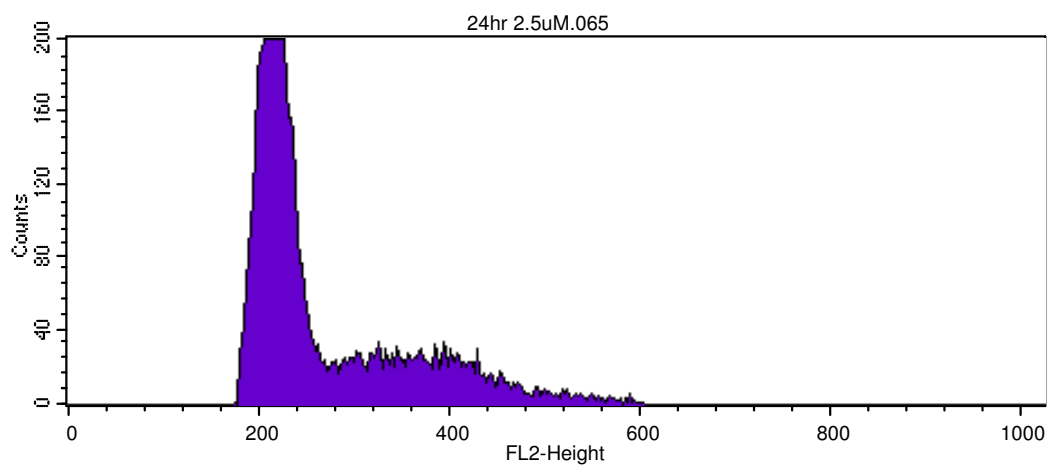


Figure 28: Histogram of HT-29 cells treated with 2.5 μ M SAHA for 24 hours.

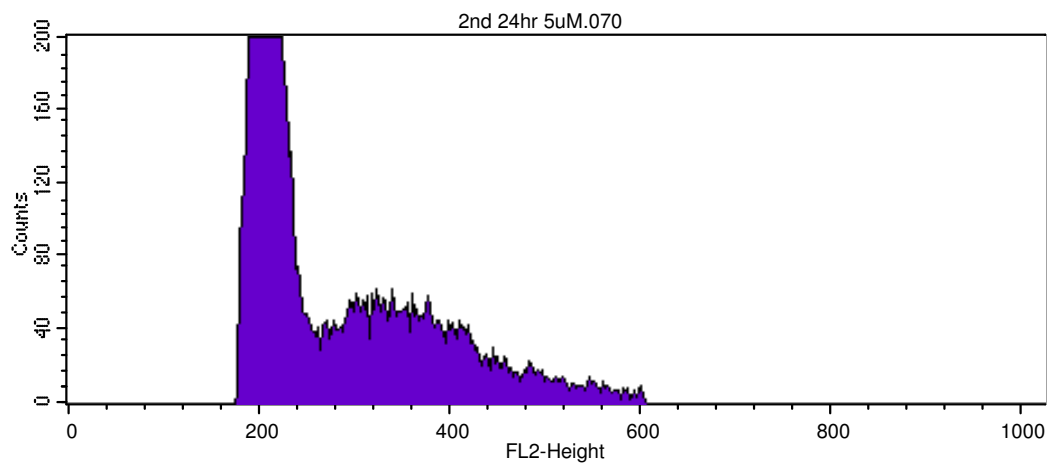


Figure 29: Histogram of HT-29 cells treated with 5 μ M SAHA for 24 hours.

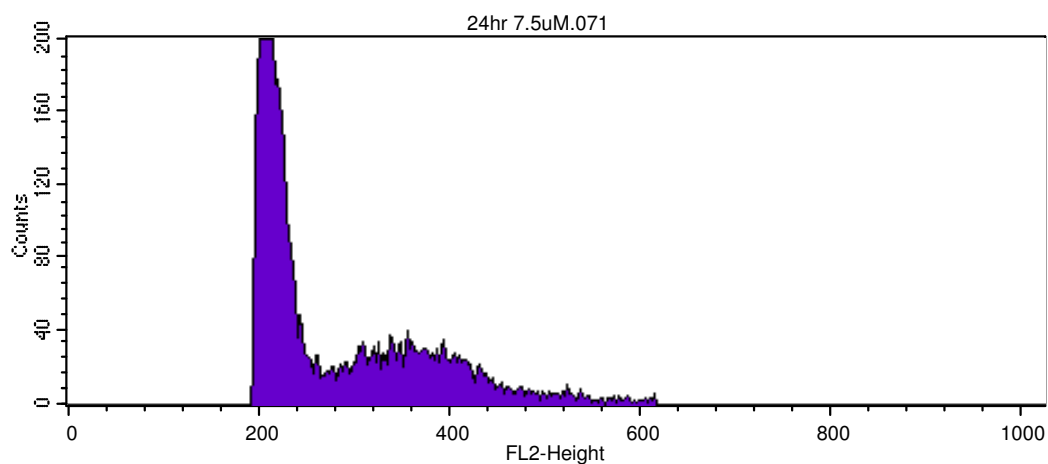


Figure 30: Histogram of HT-29 cells treated with 7.5 μ M SAHA for 24 hours.

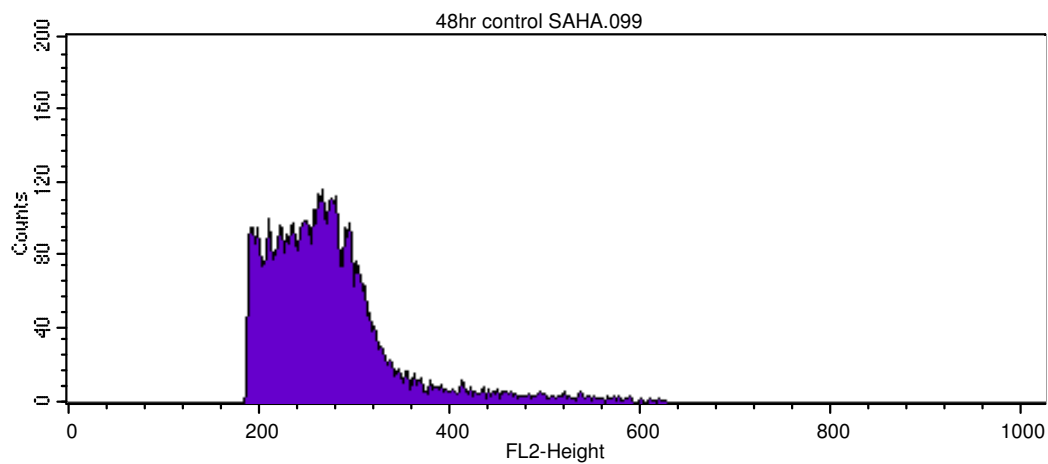


Figure 31: Histogram of HT-29/SAHA control cells treated with DMSO for 48 hours.

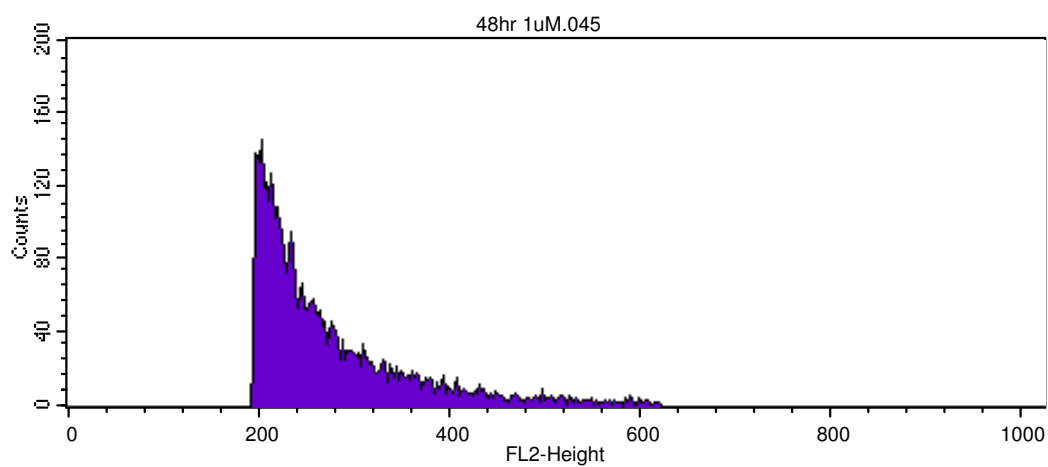


Figure 32: Histogram of HT-29 cells treated with 1 μM SAHA for 48 hours.

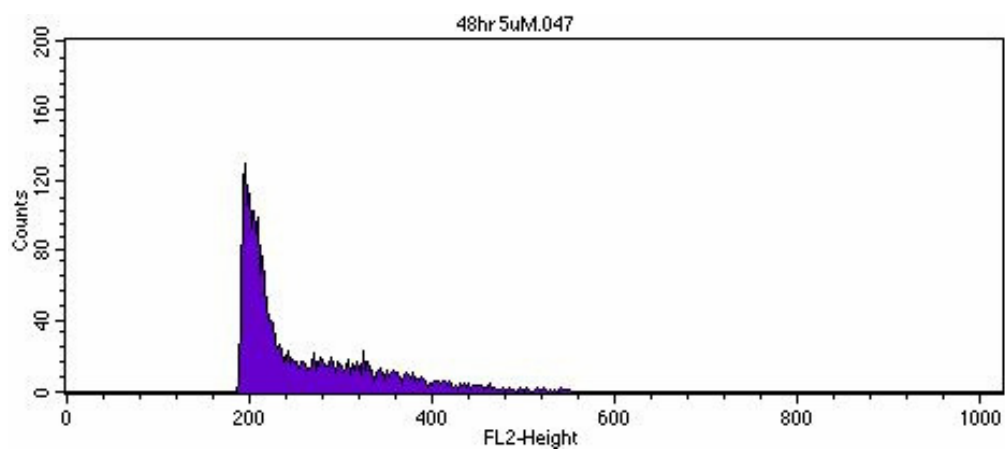


Figure 33: Histogram of HT-29 cells treated with 5 μ M SAHA for 48 hours.

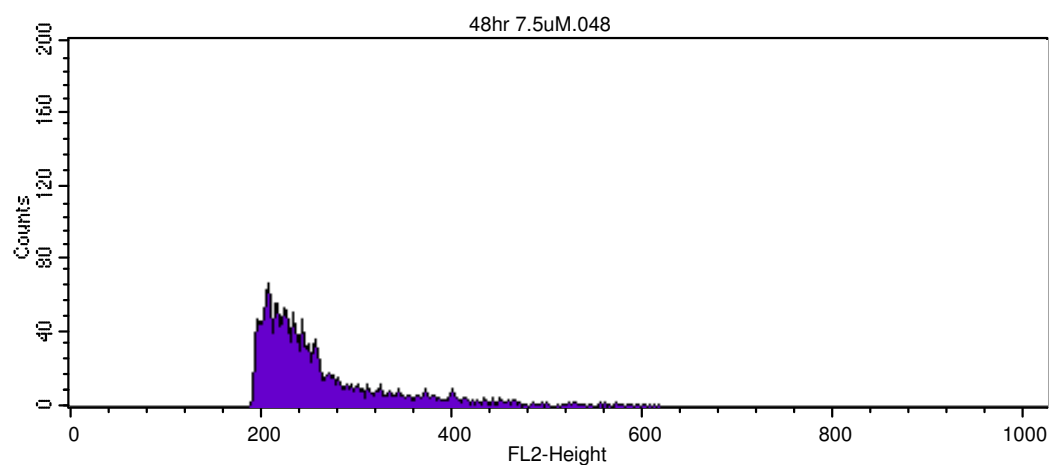


Figure 34: Histogram of HT-29 cells treated with 7.5 μ M SAHA for 48 hours.

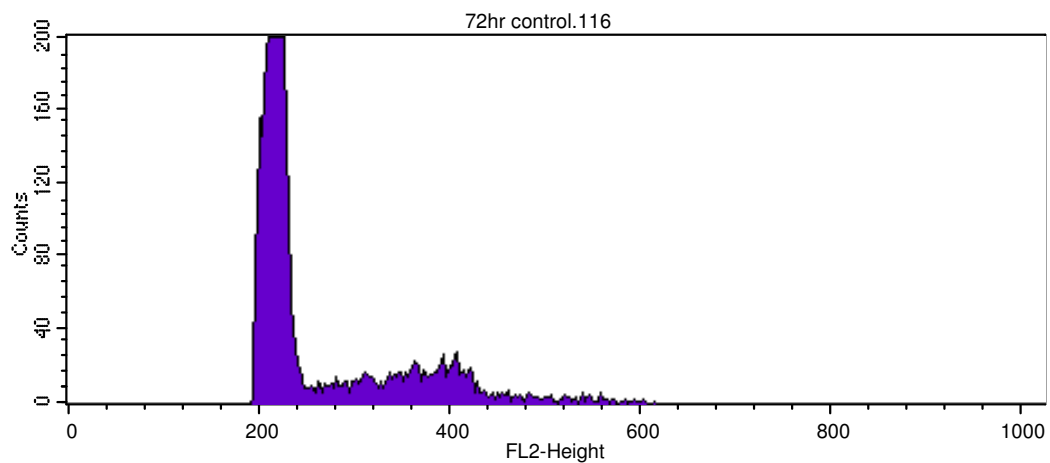


Figure 35: Histogram of HT-29/SAHA control cells treated with DMSO for 72 hours.

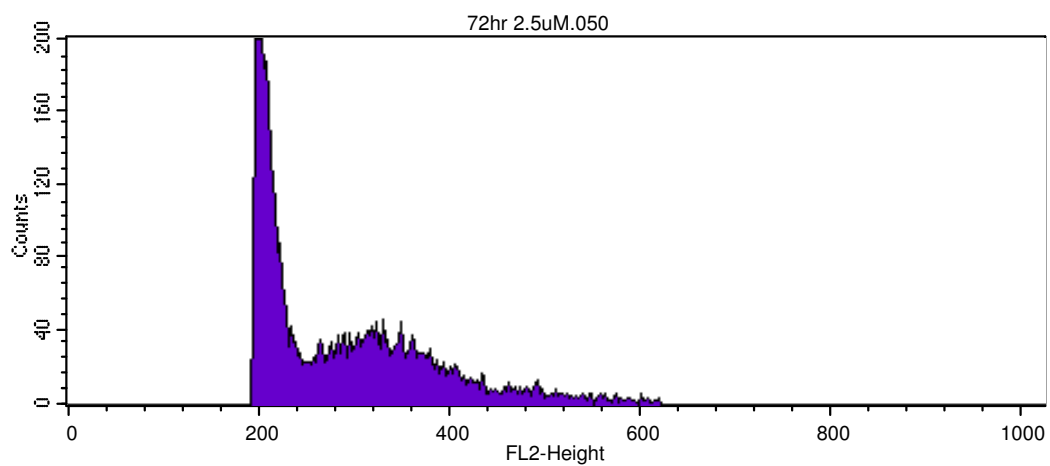


Figure 36: Histogram of HT-29 cells treated with 2.5µM SAHA for 72 hours.

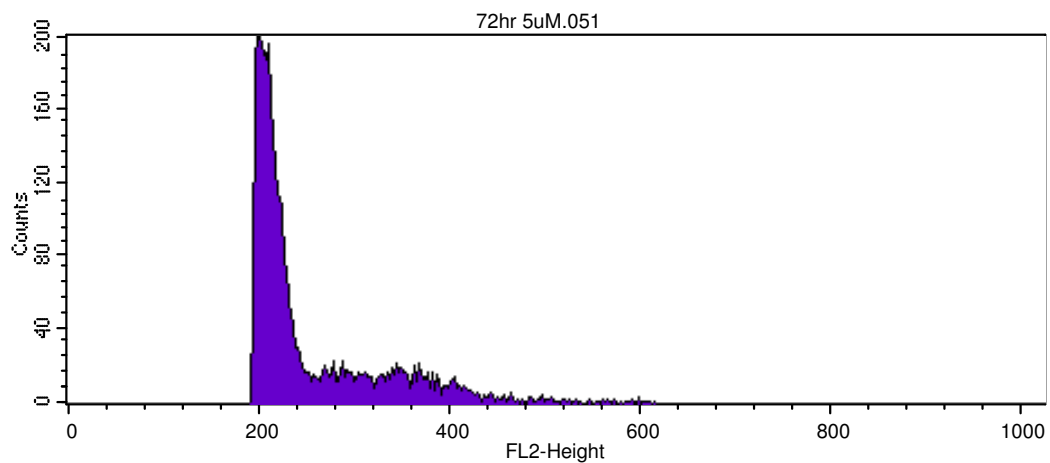


Figure 37: Histogram of HT-29 cells treated with 5 μ M SAHA for 72 hours.

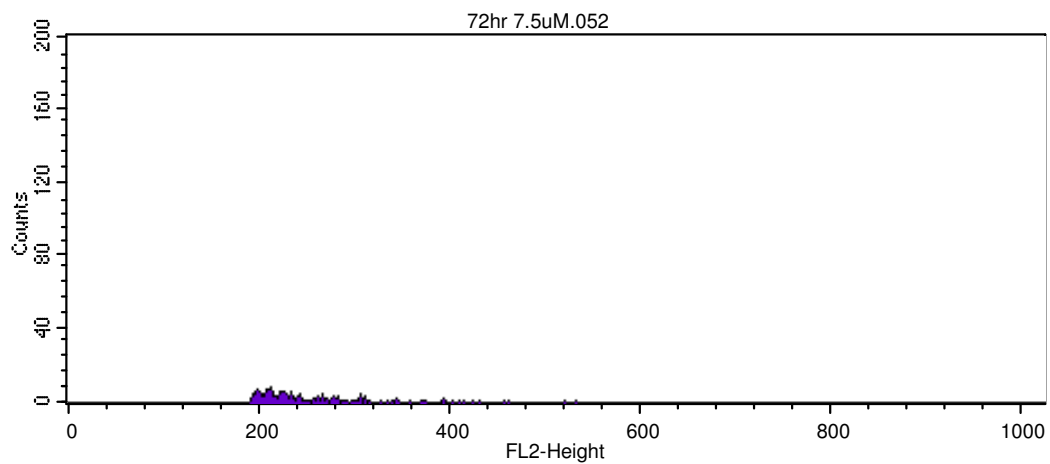


Figure 38: Histogram of HT-29 cells treated with 7.5 μ M SAHA for 72 hours.

MCF-7/lycopene

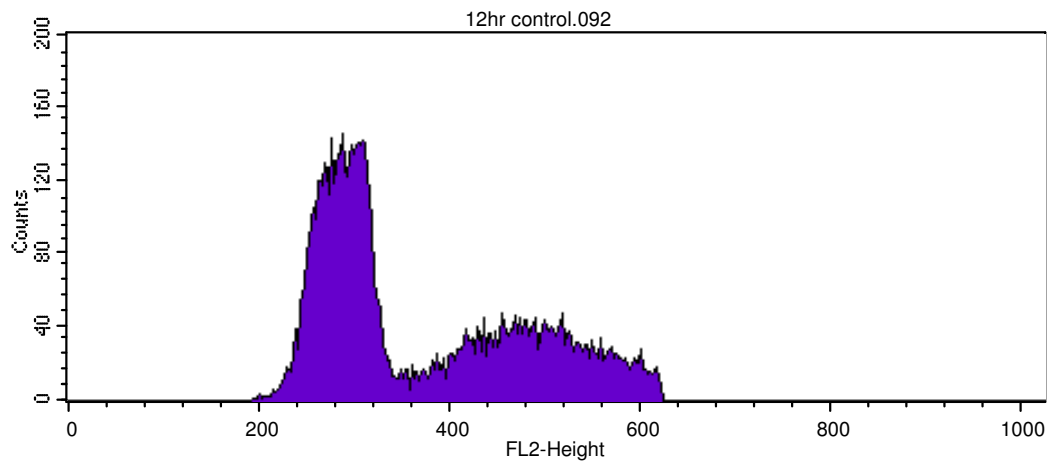


Figure 39: Histogram of MCF-7/lycopene control cells treated with THF for 12 hours.

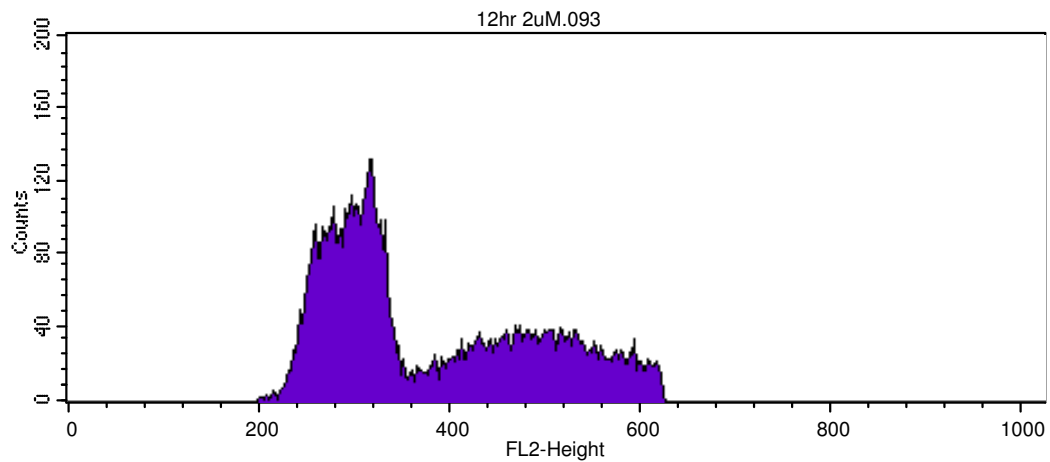


Figure 40: Histogram of MCF-7 cells treated with 2µM lycopene for 12 hours.

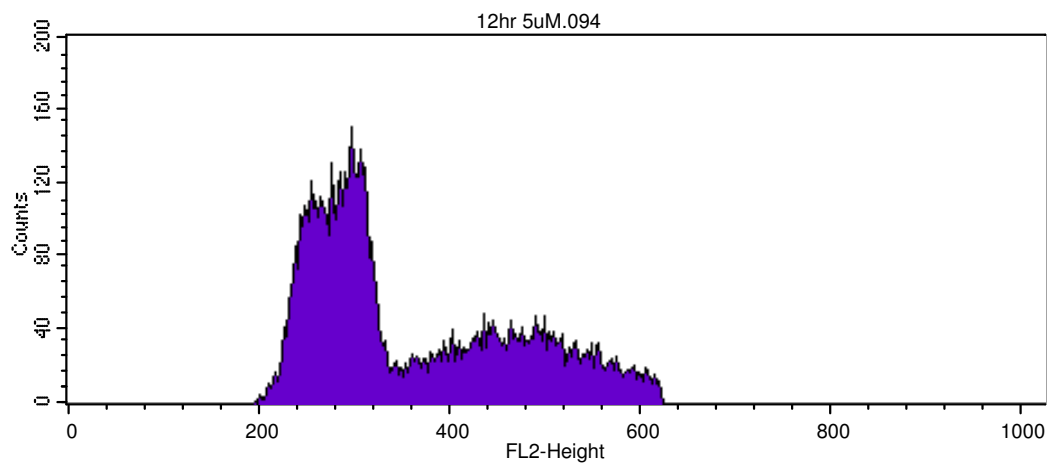


Figure 41: Histogram of MCF-7 cells treated with 5μM lycopene for 12 hours.

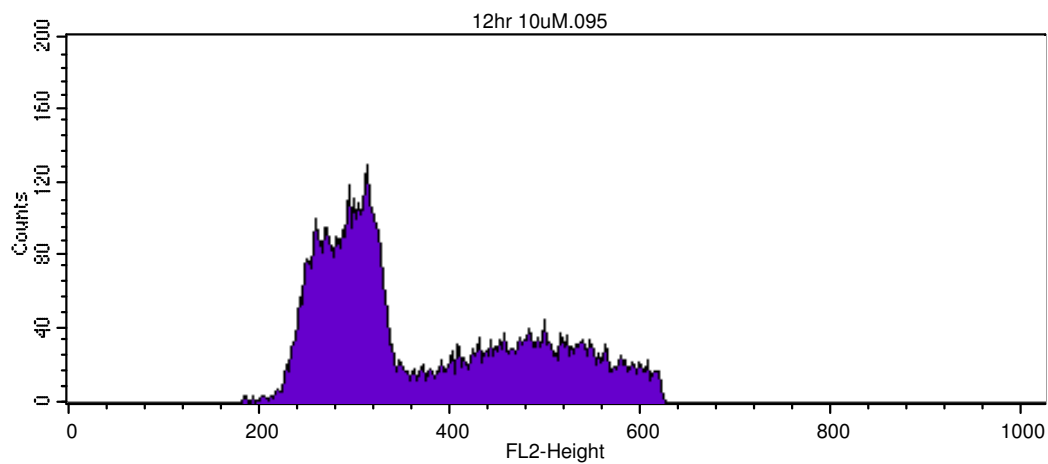


Figure 42: Histogram of MCF-7 cells treated with 10μM lycopene for 12 hours.

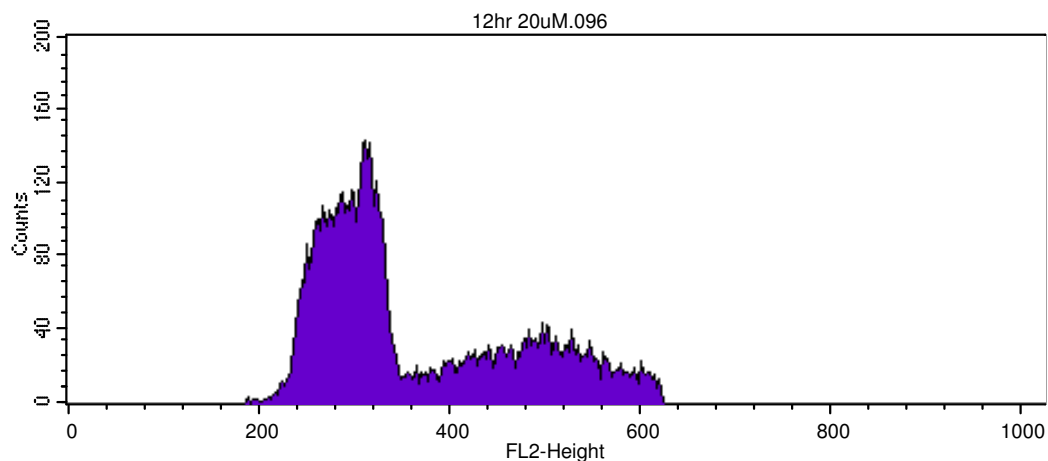


Figure 43: Histogram of MCF-7 cells treated with 20μM lycopene for 12 hours.

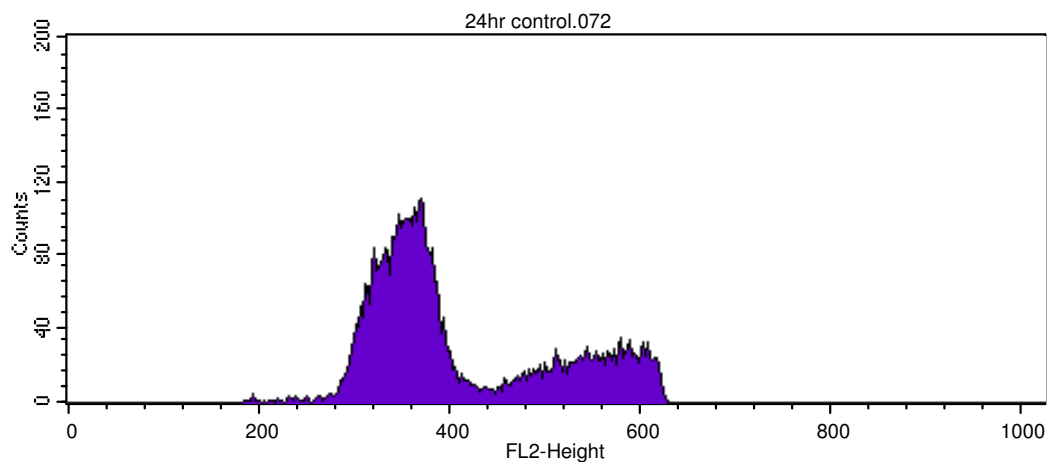


Figure 44: Histogram of MCF-7/lycopene control cells treated with THF for 24 hours.

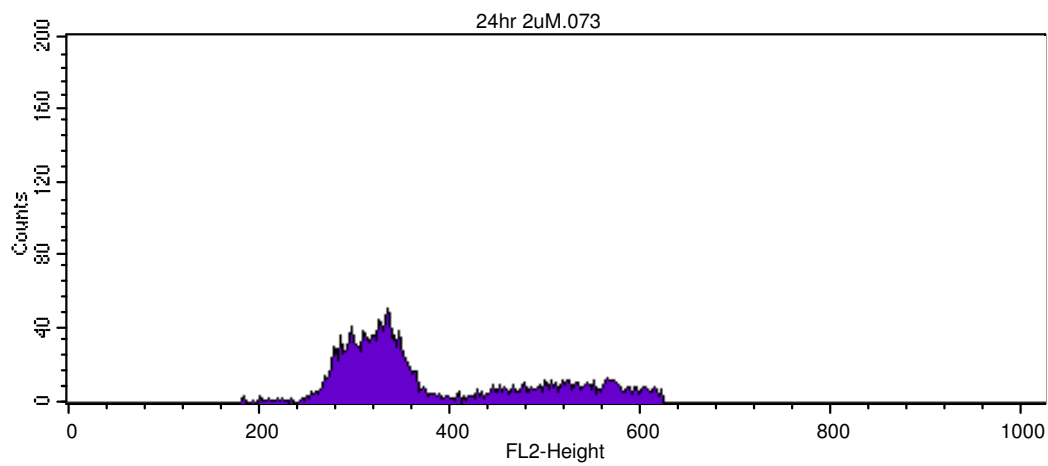


Figure 45: Histogram of MCF-7 cells treated with 2μM lycopene for 24 hours.

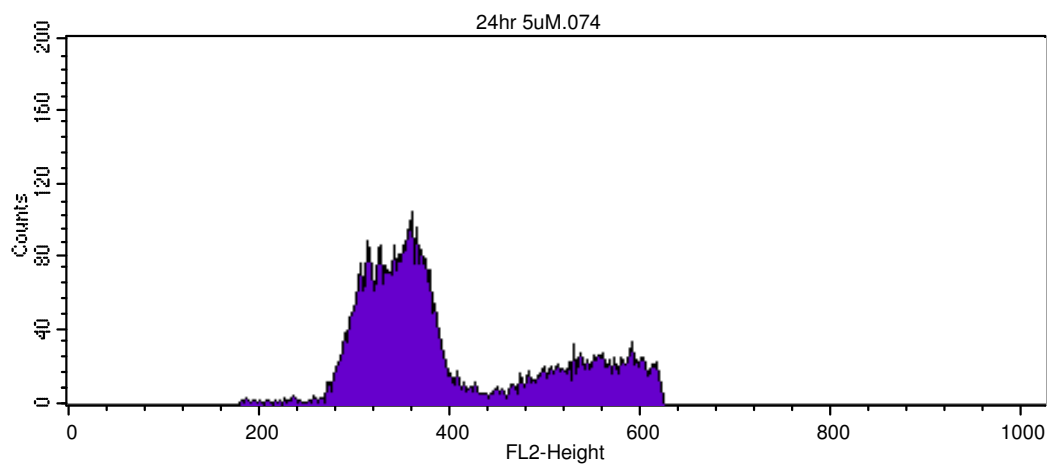


Figure 46: Histogram of MCF-7 cells treated with 5μM lycopene for 24 hours.

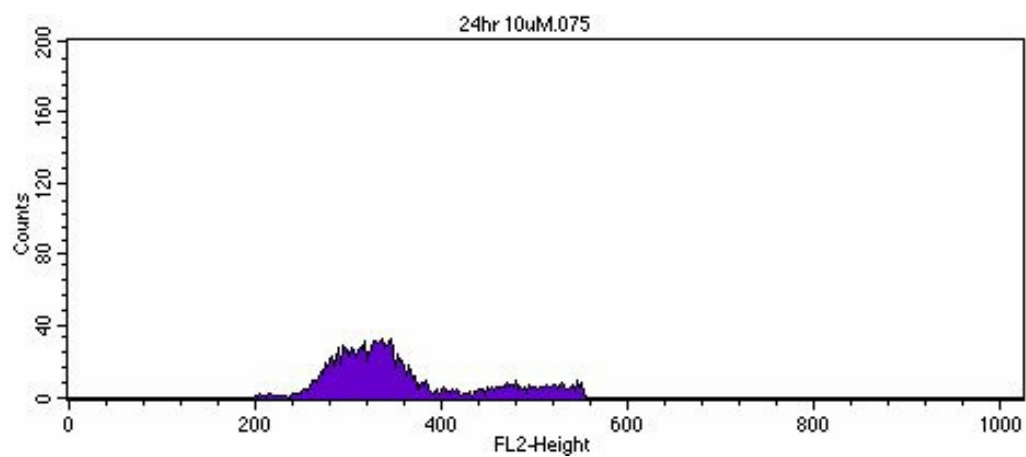


Figure 47: Histogram of MCF-7 cells treated with 10μM lycopene for 24 hours.

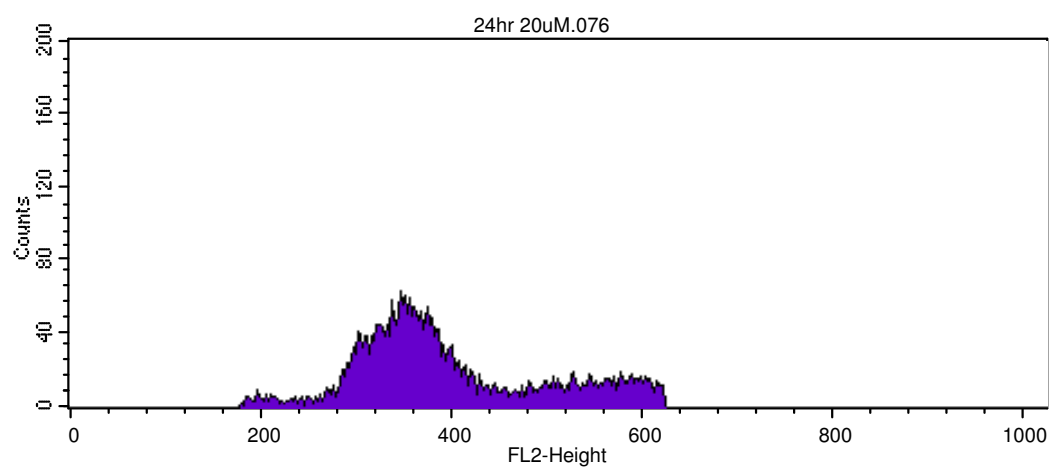


Figure 48: Histogram of MCF-7 cells treated with 20μM lycopene for 24 hours.

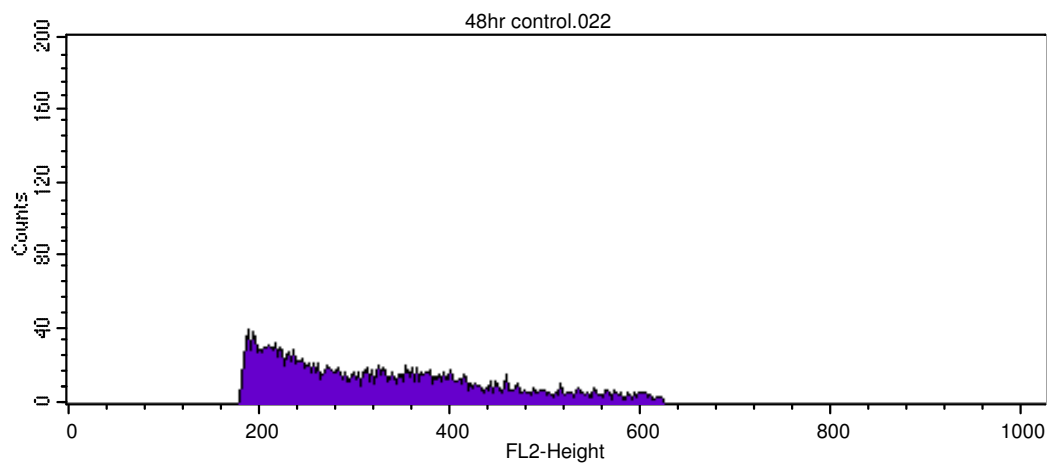


Figure 49: Histogram of MCF-7/lycopene control cells treated with THF for 48 hours.

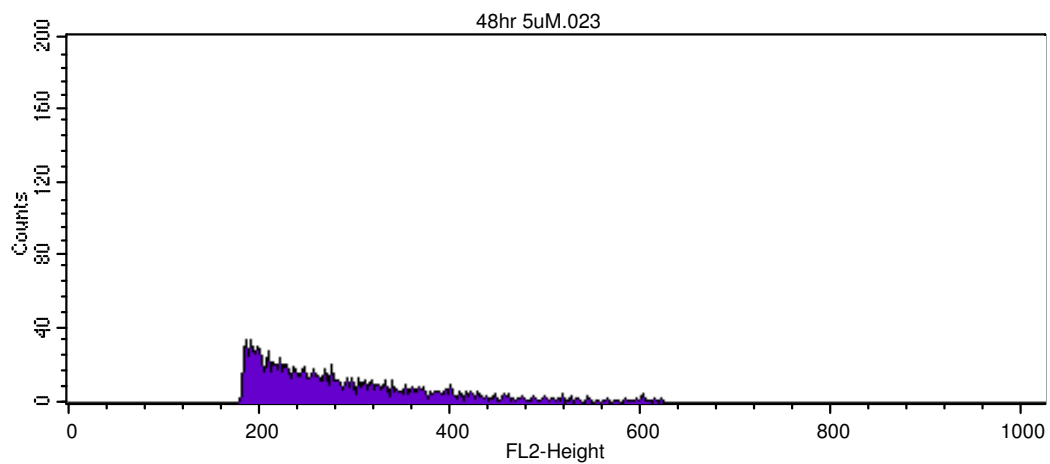


Figure 50: Histogram of MCF-7 cells treated with 5µM lycopene for 48 hours.

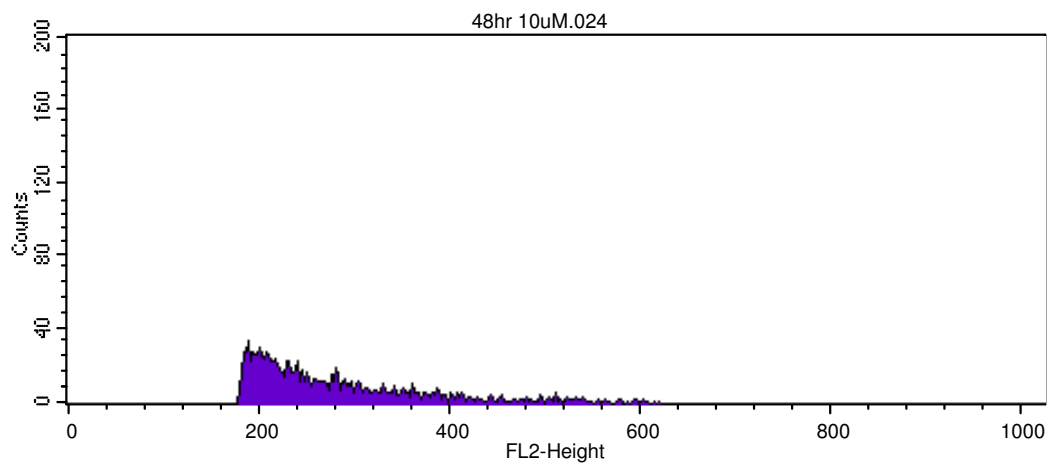


Figure 51: Histogram of MCF-7 cells treated with 10µM lycopene for 48 hours.

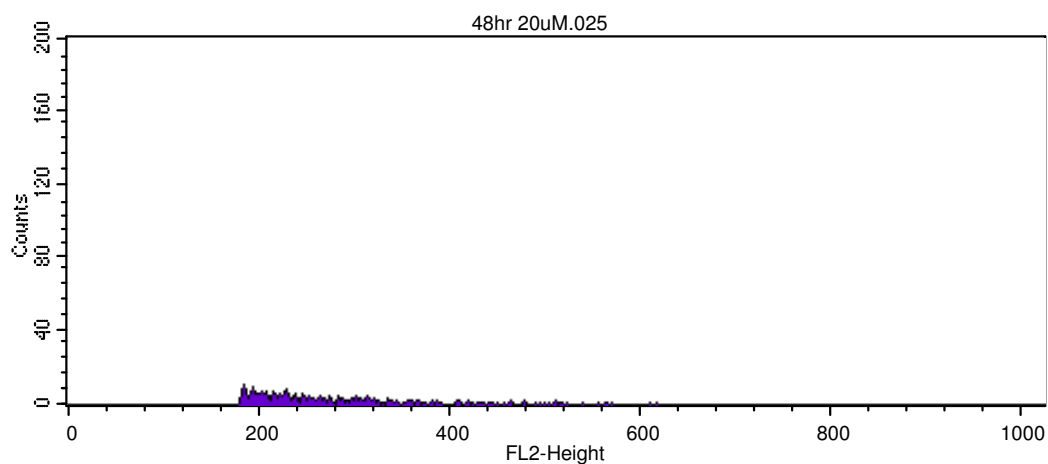


Figure 52: Histogram of MCF-7 cells treated with 20µM lycopene for 48 hours.

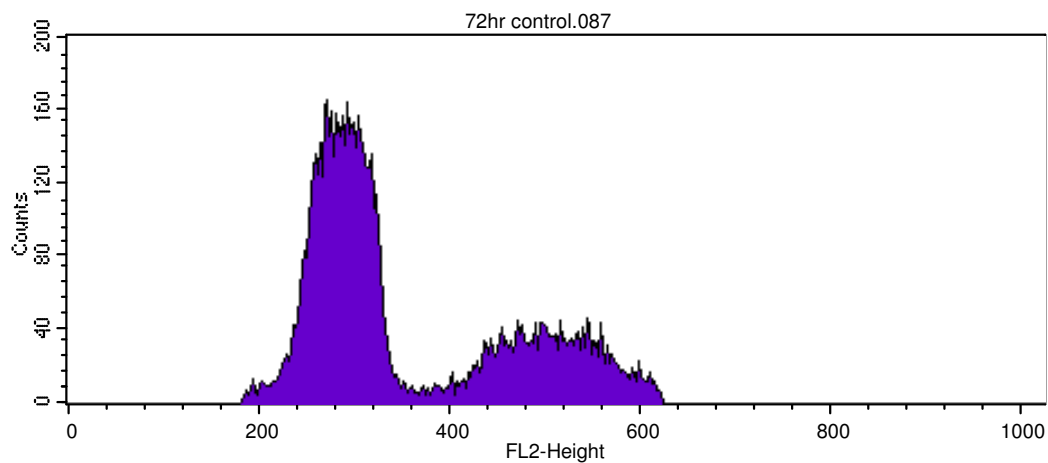


Figure 53: Histogram of MCF-7/lycopene control cells treated with THF for 72 hours.

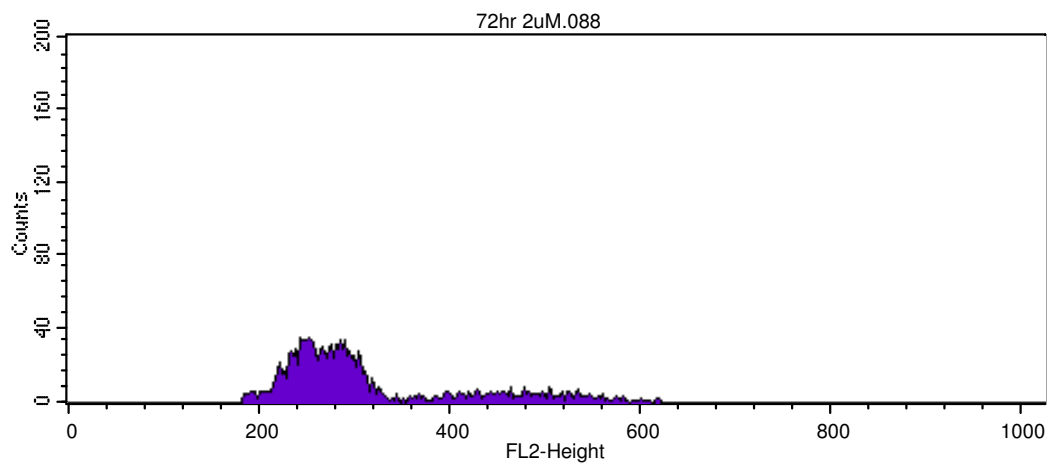


Figure 54: Histogram of MCF-7 cells treated with 2µM lycopene for 72 hours.

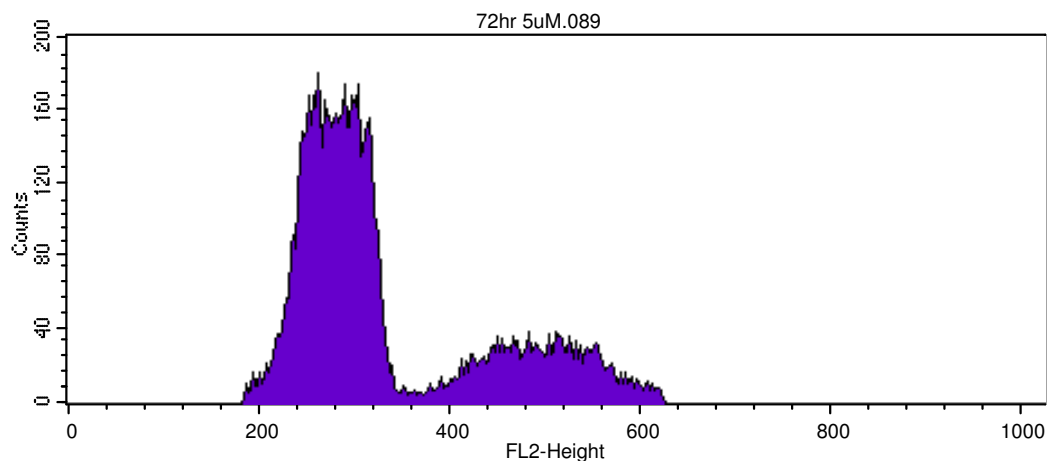


Figure 55: Histogram of MCF-7 cells treated with 5μM lycopene for 72 hours.

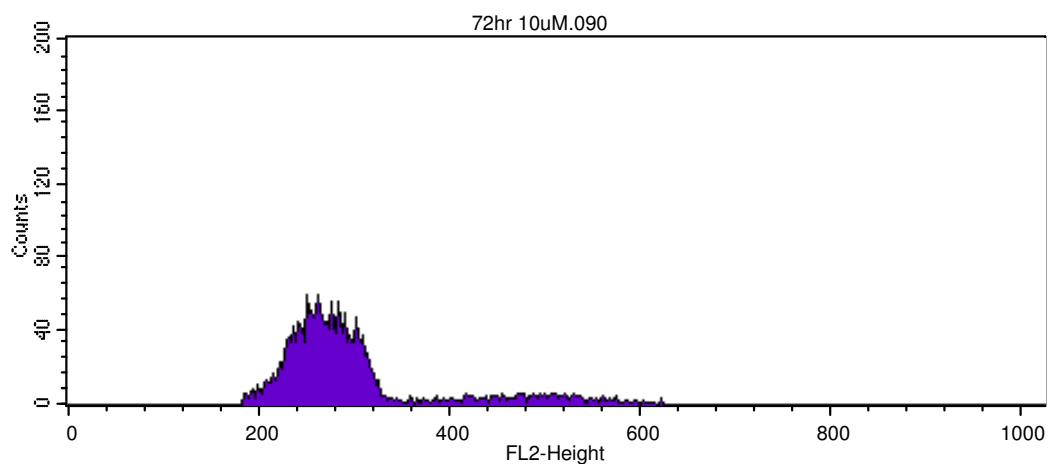


Figure 56: Histogram of MCF-7 cells treated with 10μM lycopene for 72 hours.

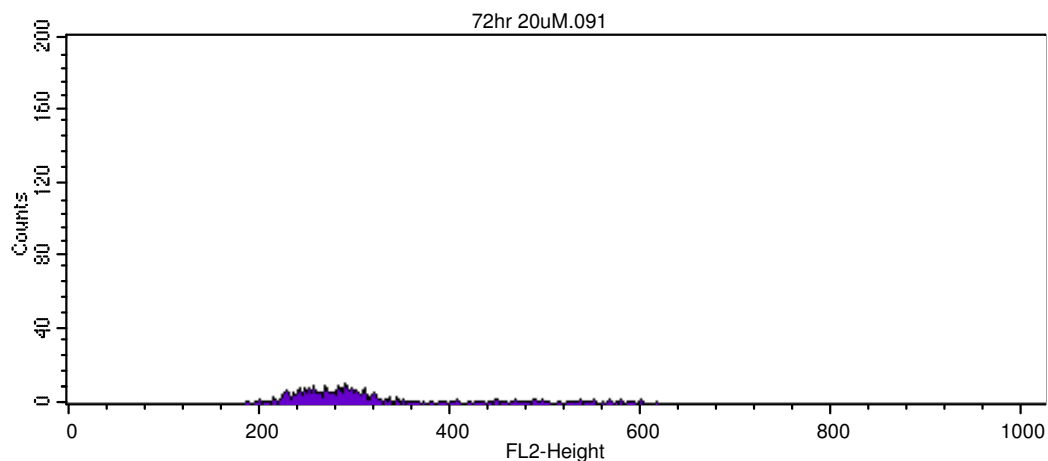


Figure 57: Histogram of MCF-7 cells treated with 20 μ M lycopene for 72 hours.

MCF-7/thalidomide

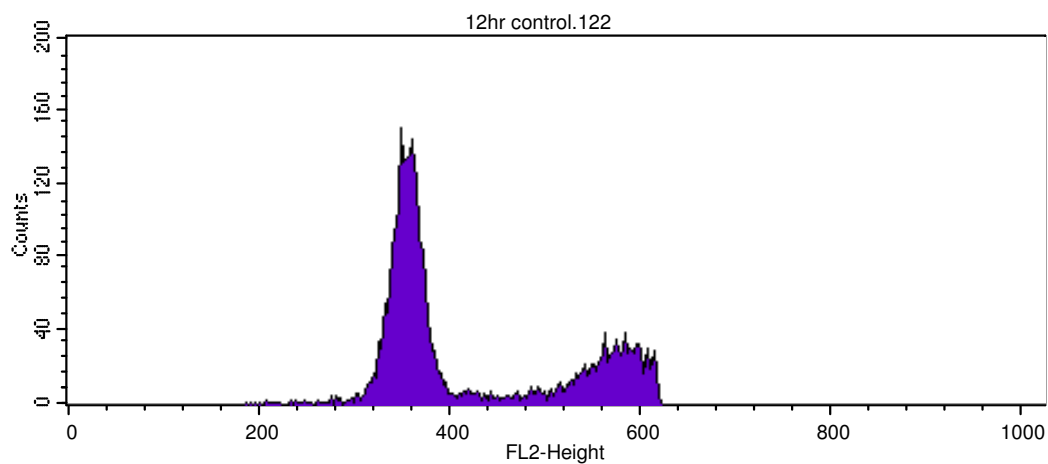


Figure 58: Histogram of MCF-7/thalidomide control cells treated with DMSO for 12 hours.

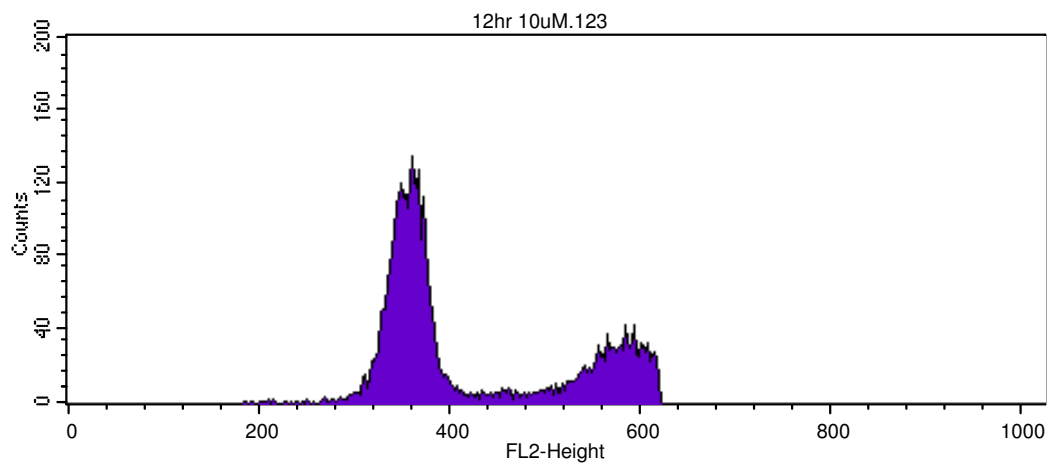


Figure 59: Histogram of MCF-7 cells treated with 10 μ M thalidomide for 12 hours.

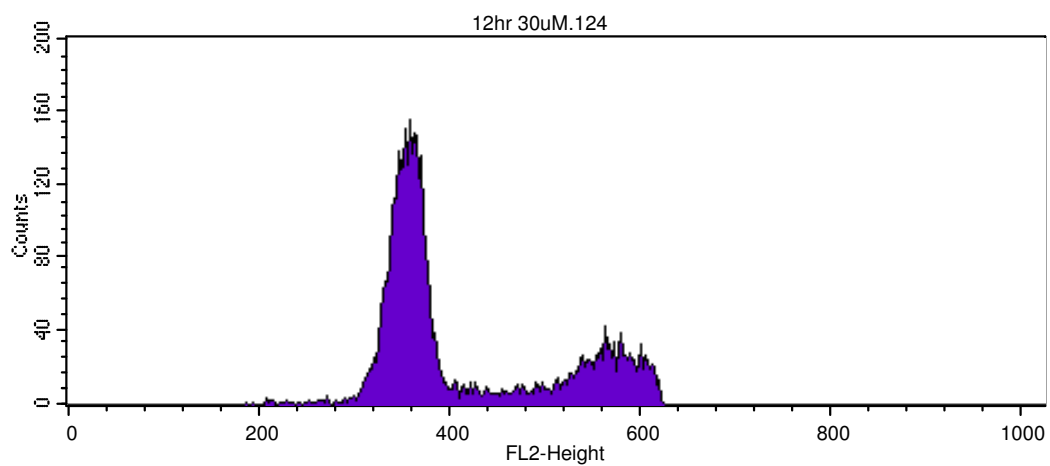


Figure 60: Histogram of MCF-7 cells treated with 30 μ M thalidomide for 12 hours.

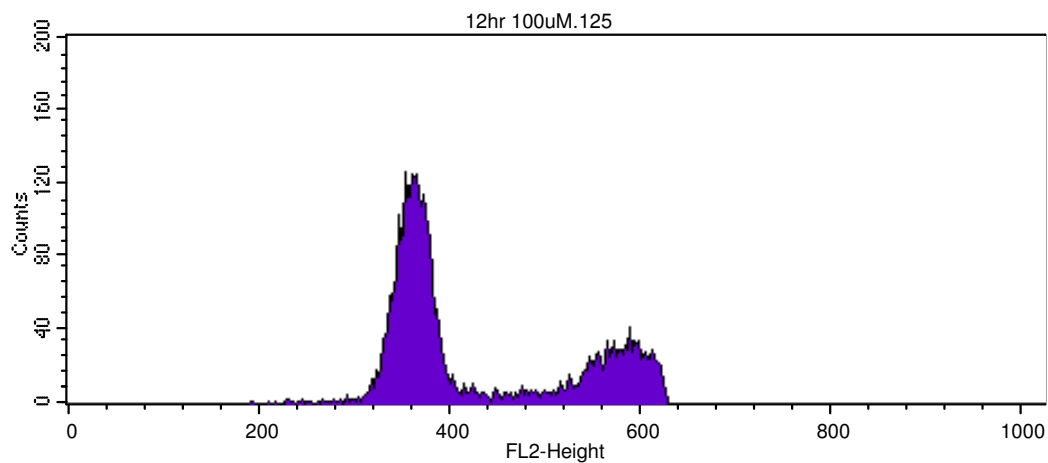


Figure 61: Histogram of MCF-7 cells treated with 100μM thalidomide for 12 hours.

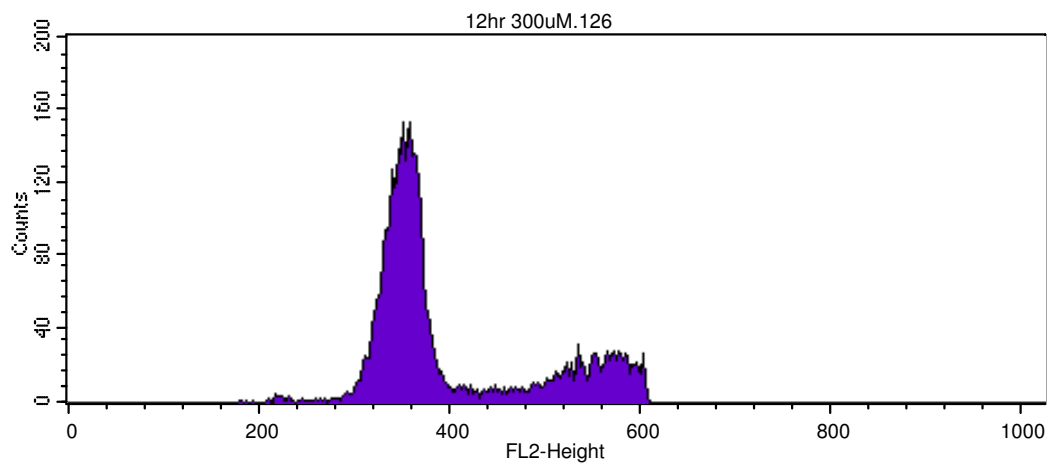


Figure 62: Histogram of MCF-7 cells treated with 300μM thalidomide for 12 hours.

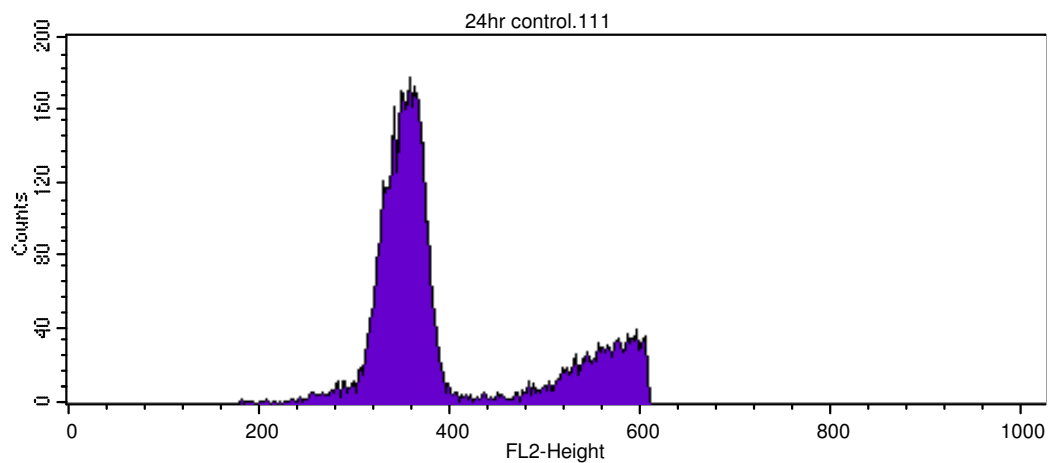


Figure 63: Histogram of MCF-7/thalidomide control cells treated with DMSO for 24 hours.

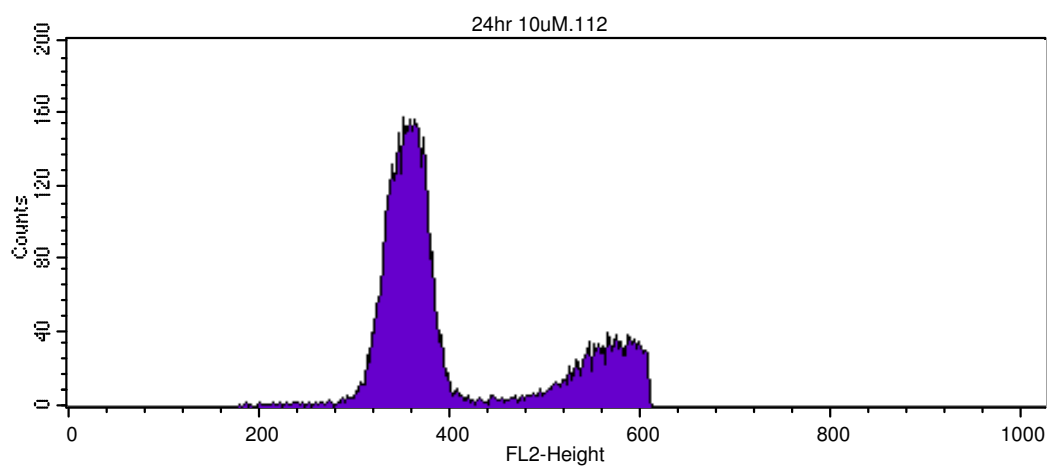


Figure 64: Histogram of MCF-7 cells treated with 10μM thalidomide for 24 hours.

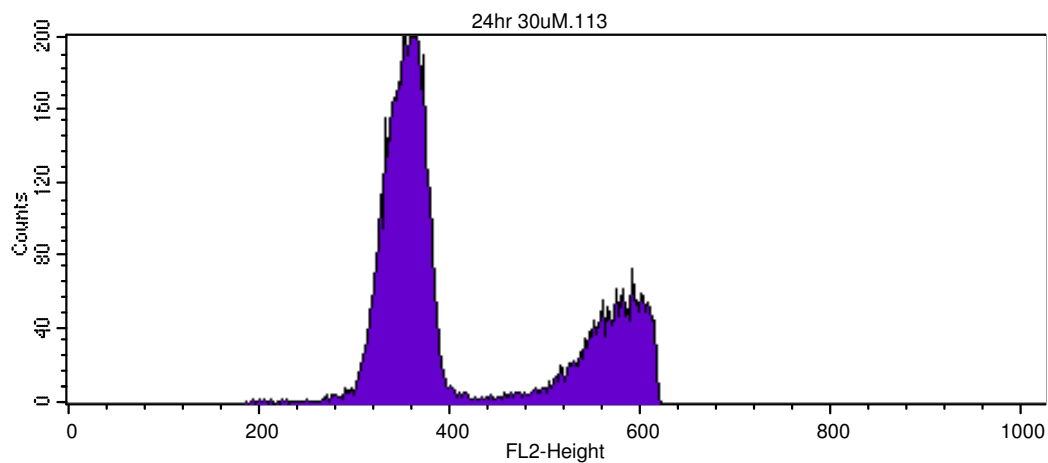


Figure 65: Histogram of MCF-7 cells treated with 30 μ M thalidomide for 24 hours.

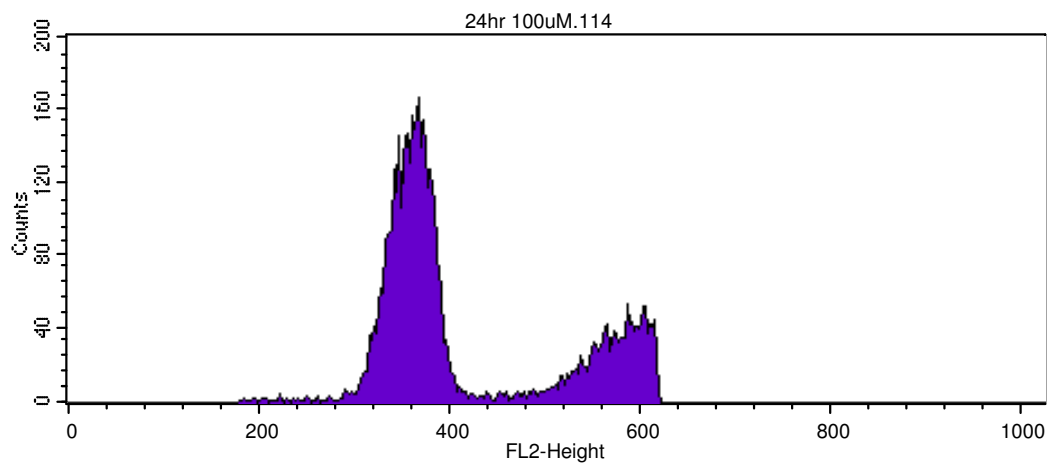


Figure 66: Histogram of MCF-7 cells treated with 100 μ M thalidomide for 24 hours.

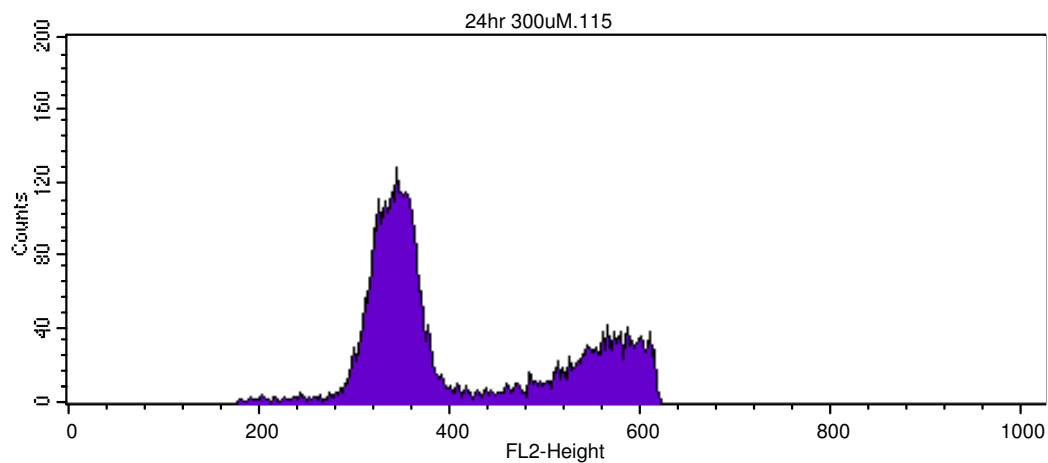


Figure 67: Histogram of MCF-7 cells treated with 300μM thalidomide for 24 hours.

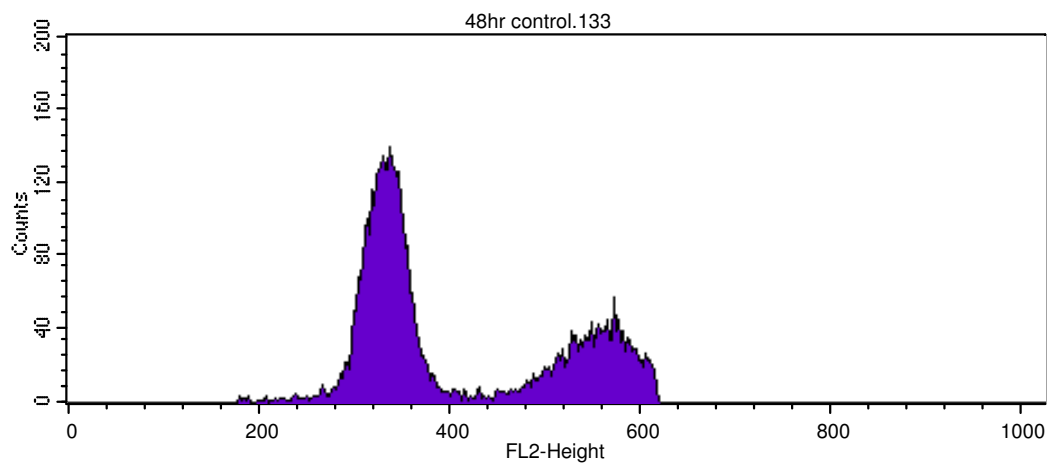


Figure 68: Histogram of MCF-7/thalidomide control cells treated with DMSO for 48 hours.

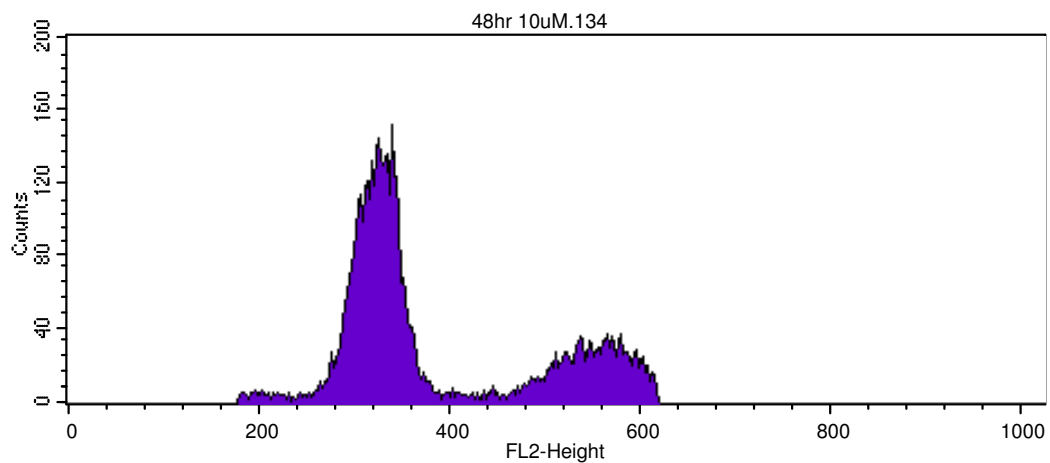


Figure 69: Histogram of MCF-7 cells treated with 10μM thalidomide for 48 hours.

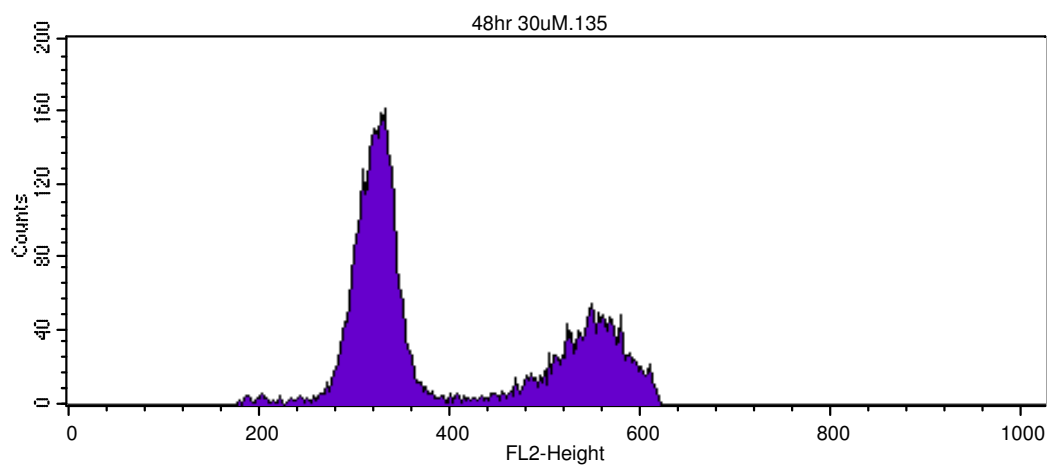


Figure 70: Histogram of MCF-7 cells treated with 30μM thalidomide for 48 hours.

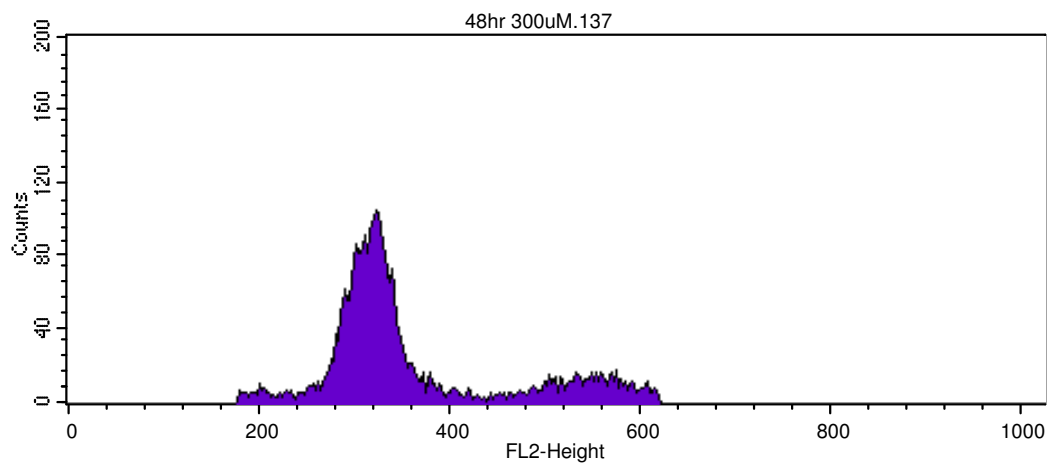


Figure 71: Histogram of MCF-7 cells treated with 300μM thalidomide for 48 hours.

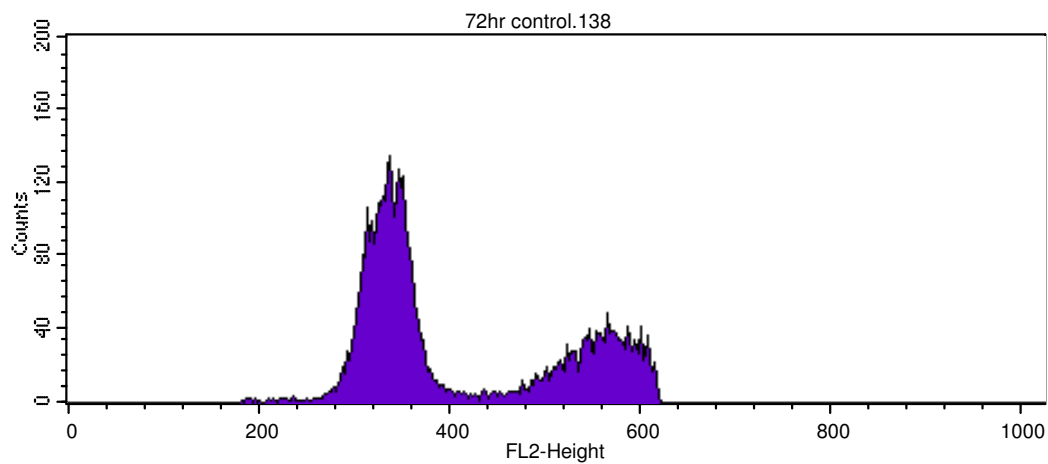


Figure 72: Histogram of MCF-7/thalidomide control cells treated with DMSO for 72 hours.

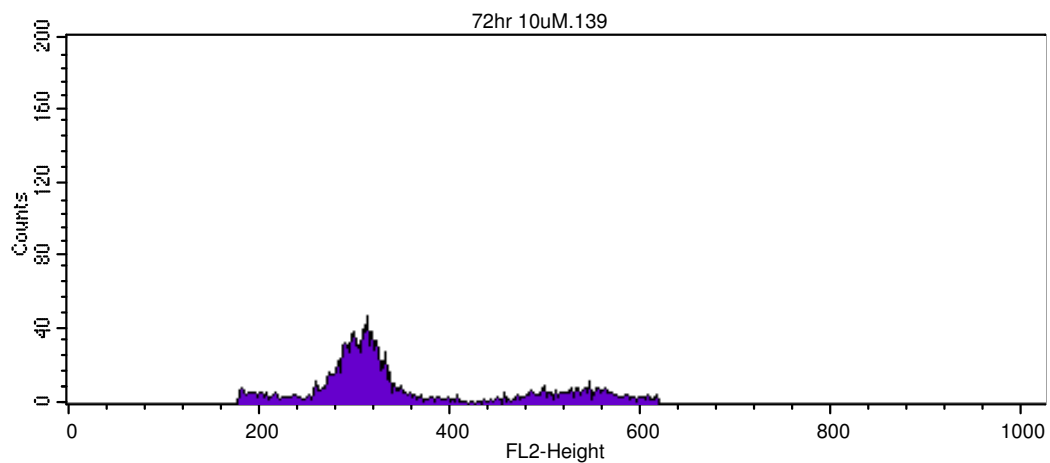


Figure 73: Histogram of MCF-7 cells treated with 10μM thalidomide for 72 hours.

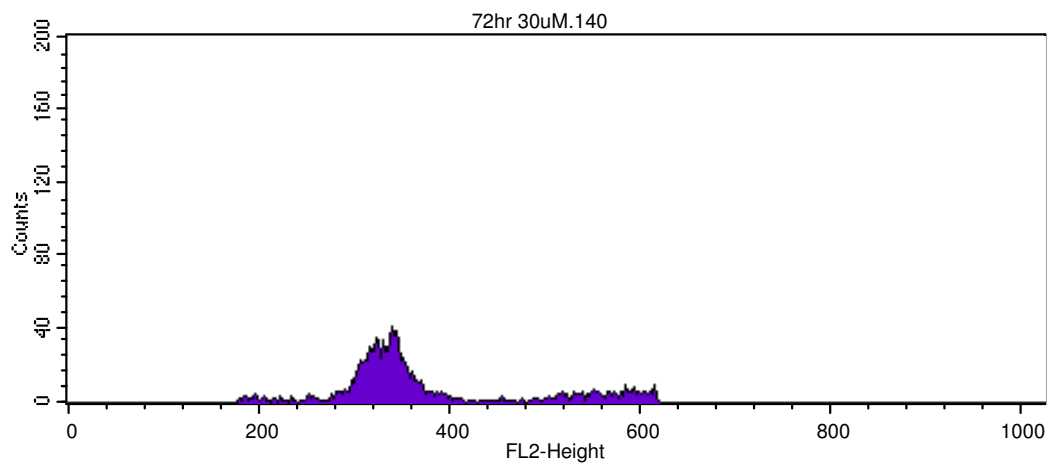


Figure 74: Histogram of MCF-7 cells treated with 30μM thalidomide for 72 hours.

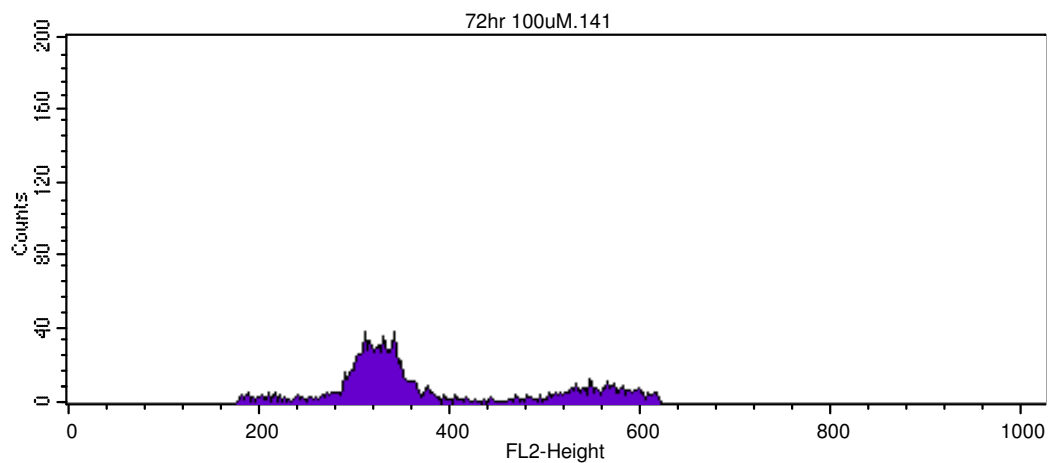


Figure 75: Histogram of MCF-7 cells treated with 100μM thalidomide for 72 hours.

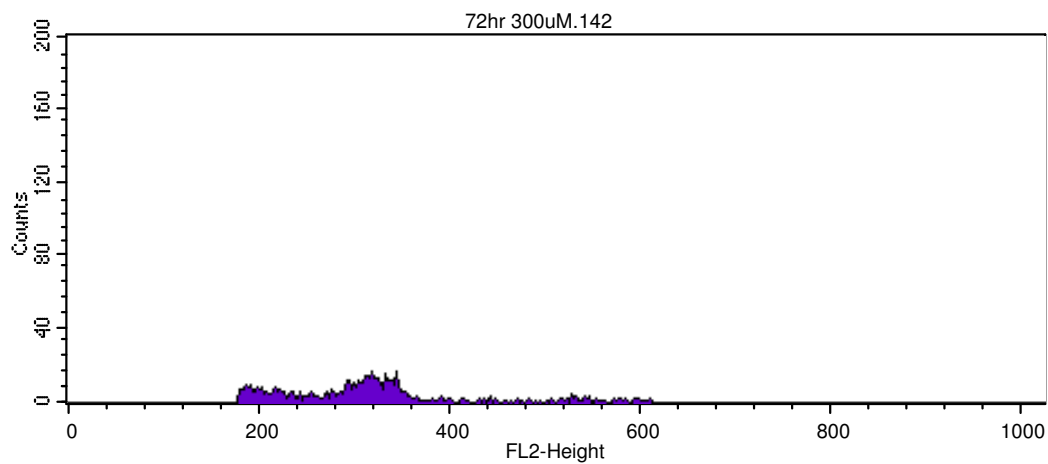


Figure 76: Histogram of MCF-7 cells treated with 300μM thalidomide for 72 hours.

MDA-MB-231/lycopene

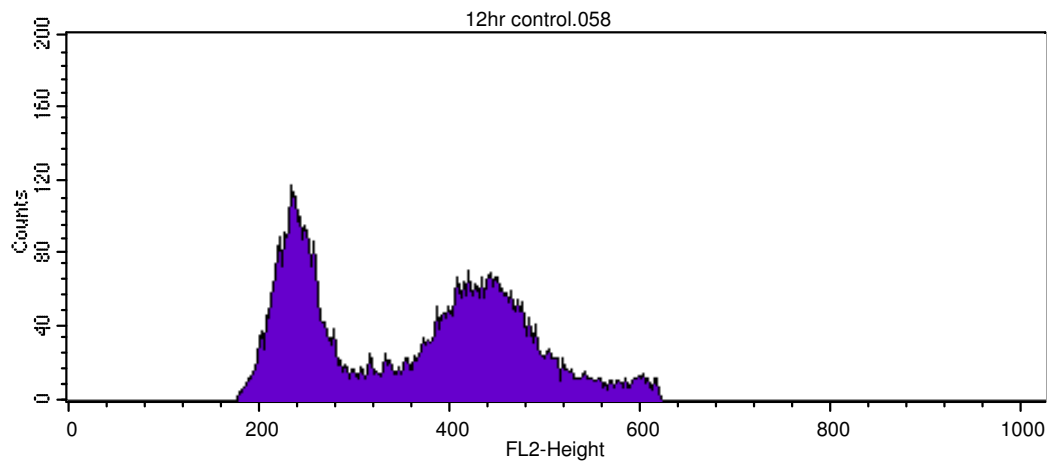


Figure 77: Histogram of MDA-MB-231/lycopene control cells treated with THF for 12 hours.

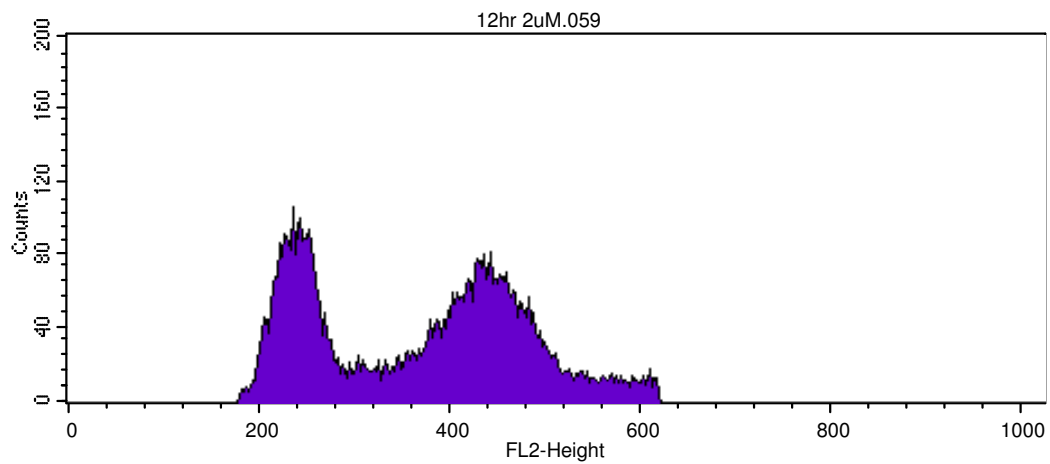


Figure 78: Histogram of MDA-MB-231 cells treated with 2µM lycopene for 12 hours.

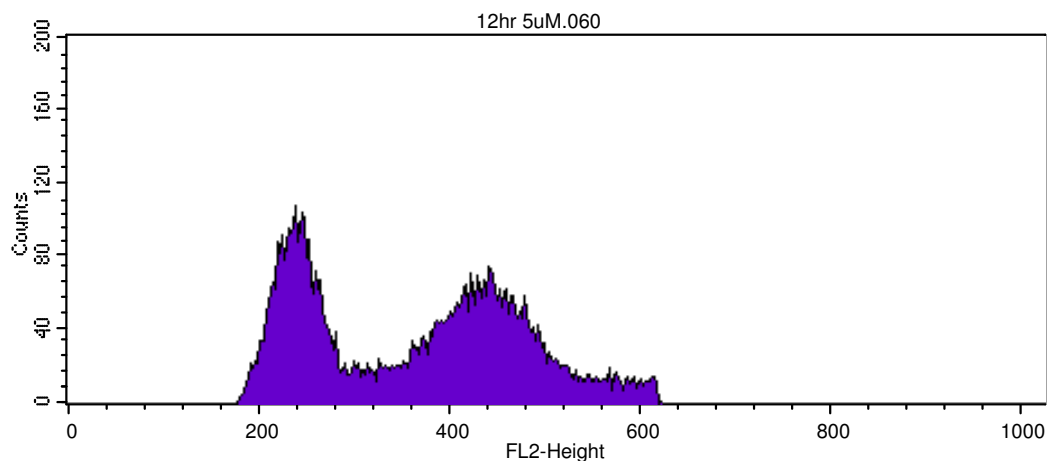


Figure 79: Histogram of MDA-MB-231 cells treated with 5µM lycopene for 12 hours.

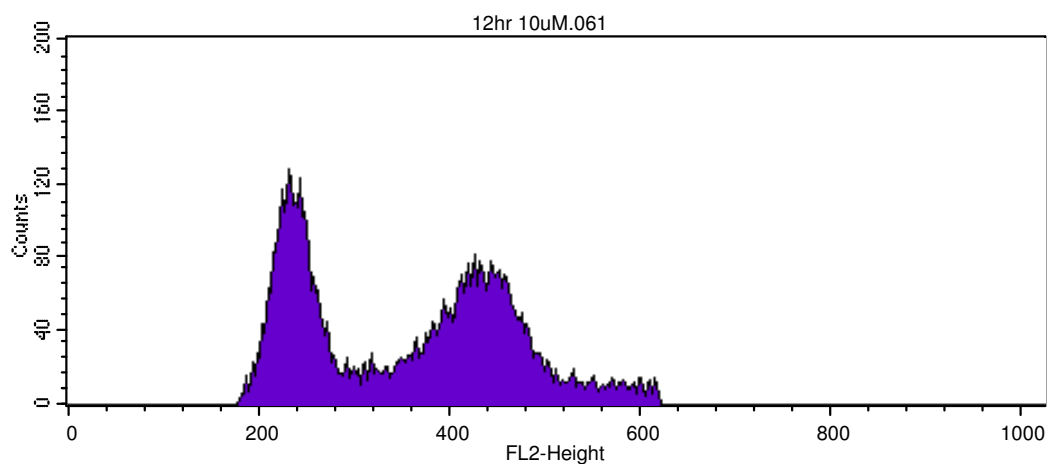


Figure 80: Histogram of MDA-MB-231 cells treated with 10µM lycopene for 12 hours.

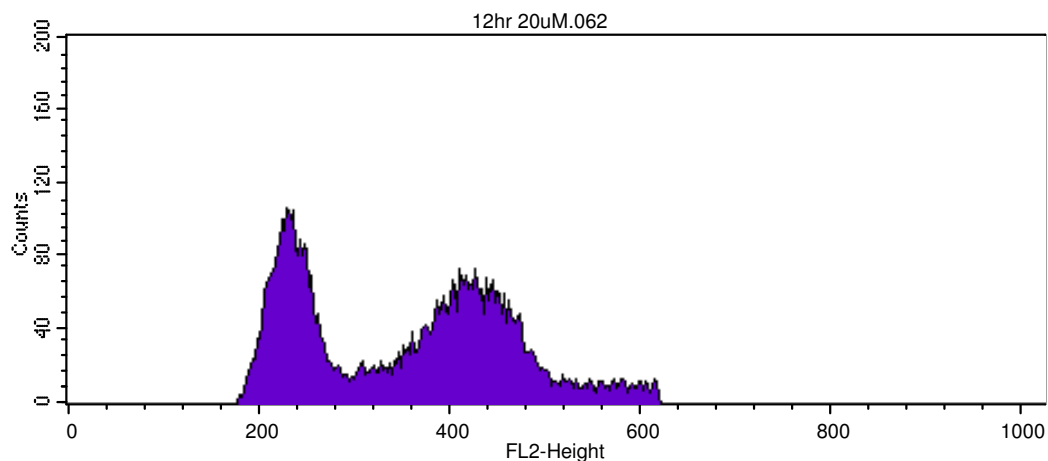


Figure 81: Histogram of MDA-MB-231 cells treated with 20 μ M lycopene for 12 hours.

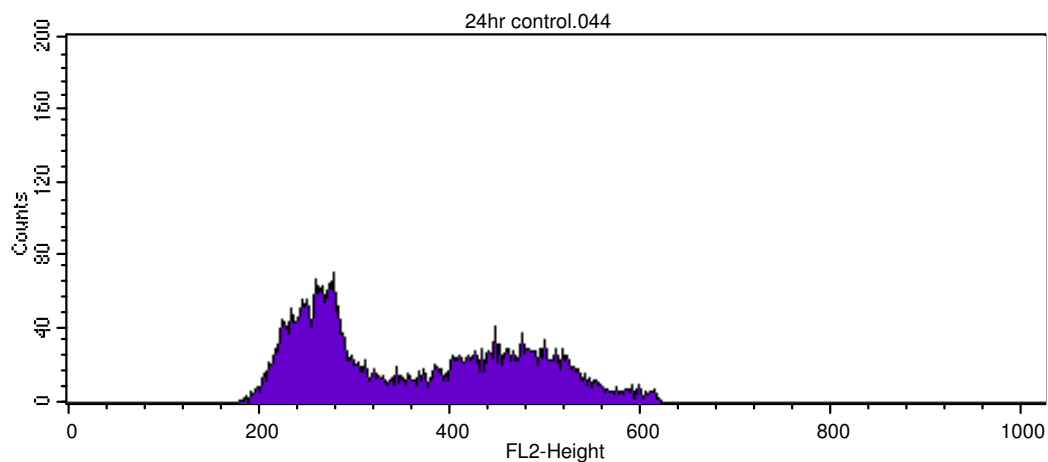


Figure 82: Histogram of MDA-MB-231/lycopene control cells treated with THF for 24 hours.

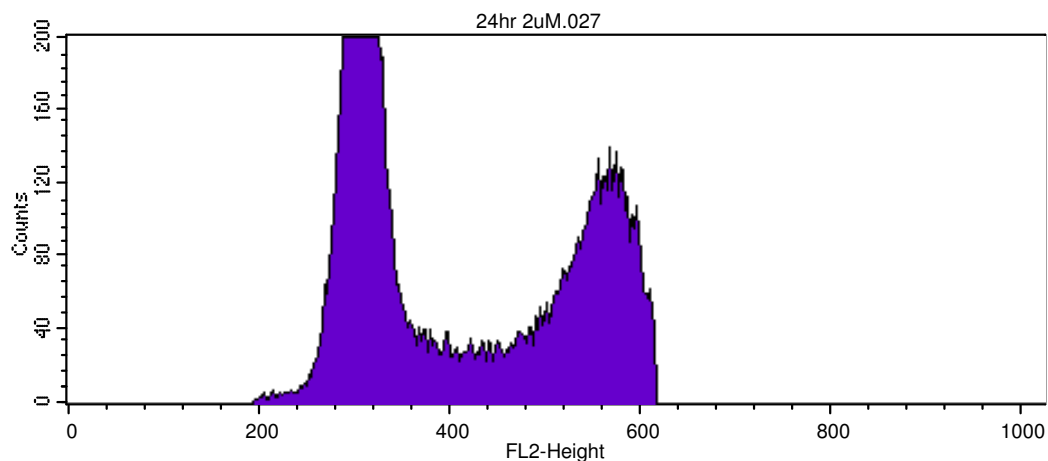


Figure 83: Histogram of MDA-MB-231 cells treated with 2µM lycopene for 24 hours.

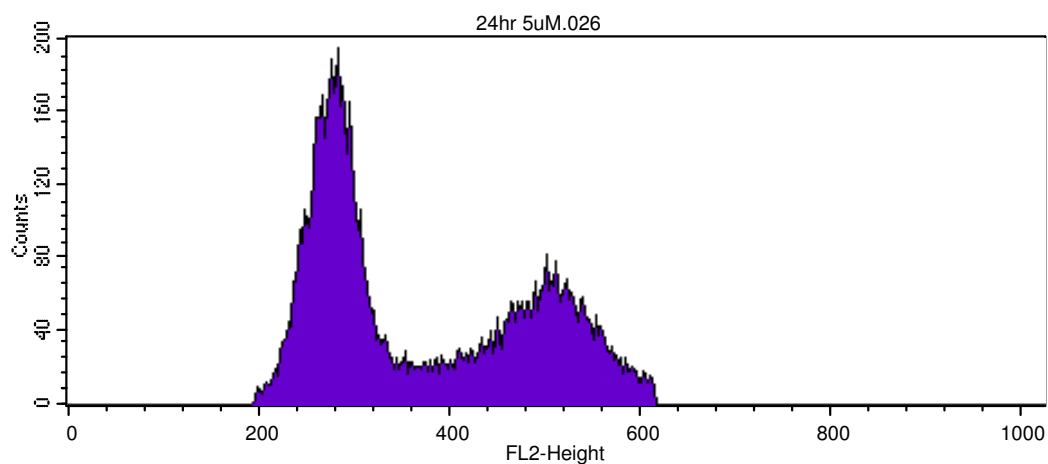


Figure 84: Histogram of MDA-MB-231 cells treated with 5µM lycopene for 24 hours.

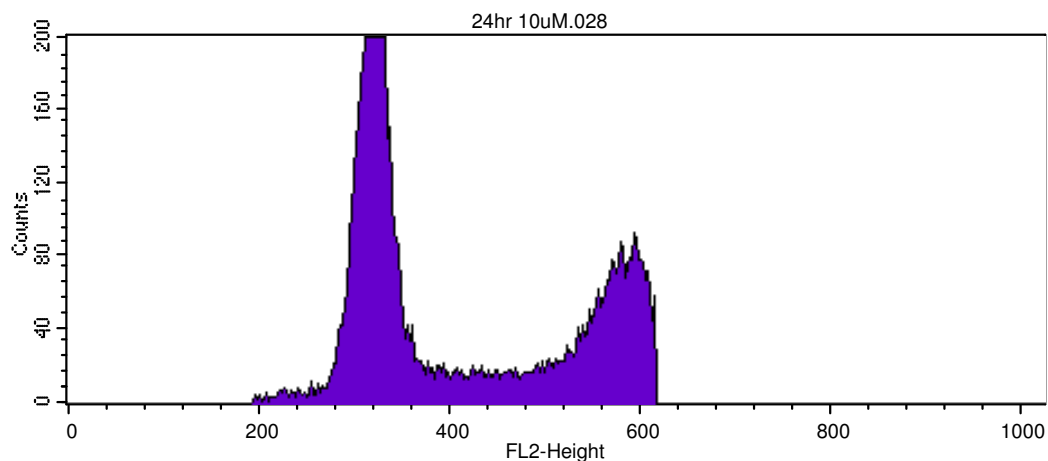


Figure 85: Histogram of MDA-MB-231 cells treated with 10µM lycopene for 24 hours.

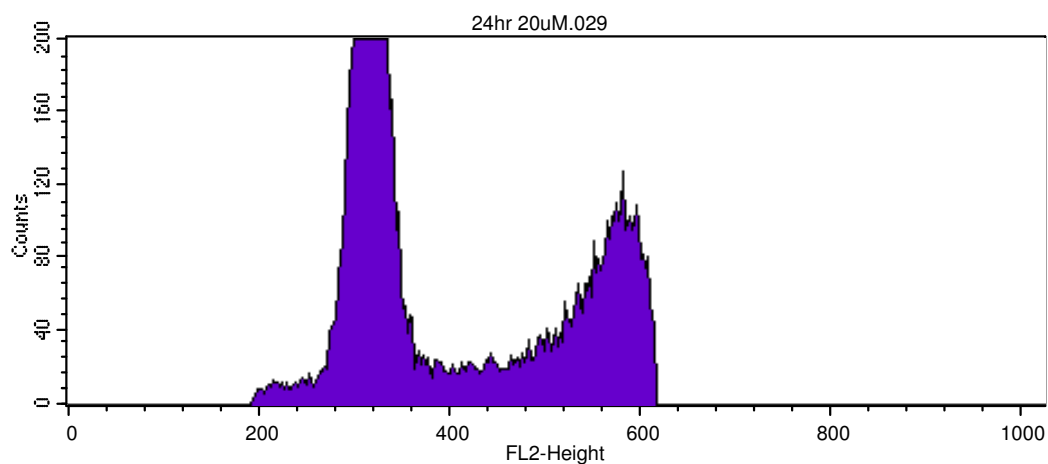


Figure 86: Histogram of MDA-MB-231 cells treated with 20µM lycopene for 24 hours.

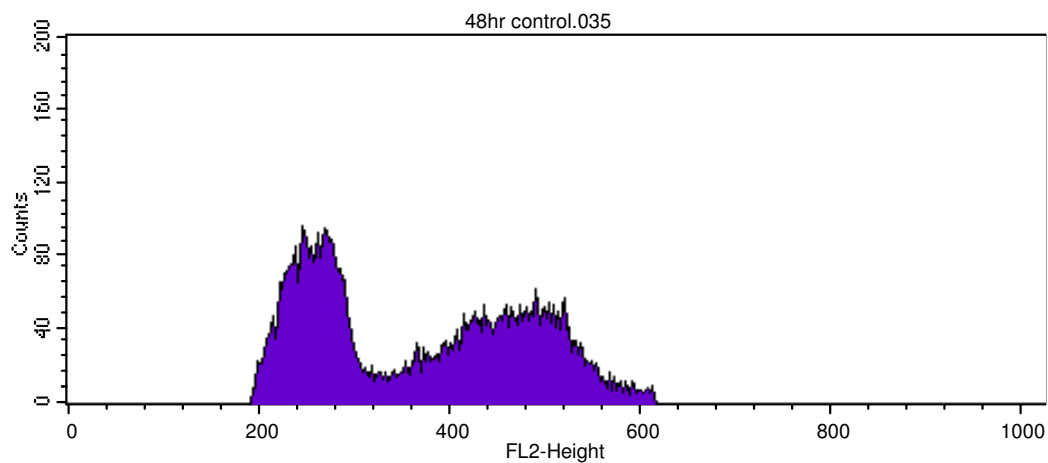


Figure 87: Histogram of MDA-MB-231/lycopene control cells treated with THF for 48 hours.

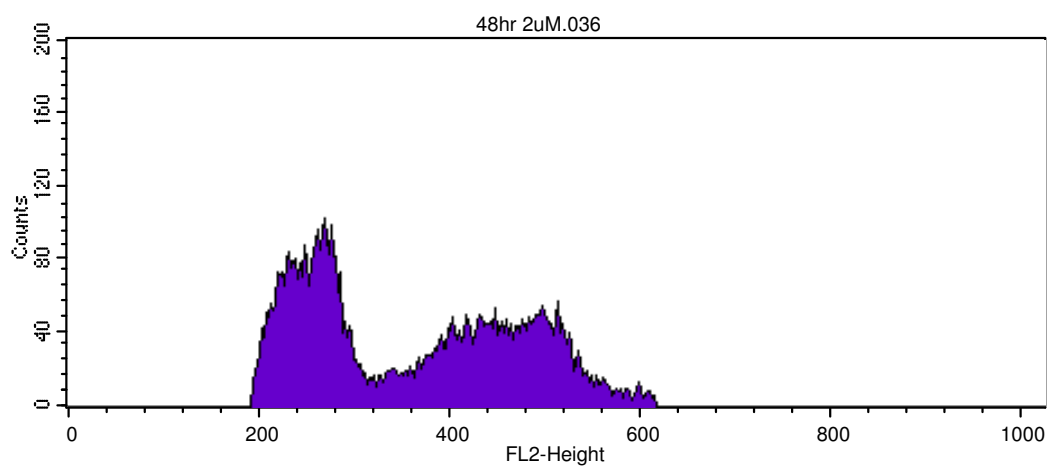


Figure 88: Histogram of MDA-MB-231 cells treated with 2µM lycopene for 48 hours.

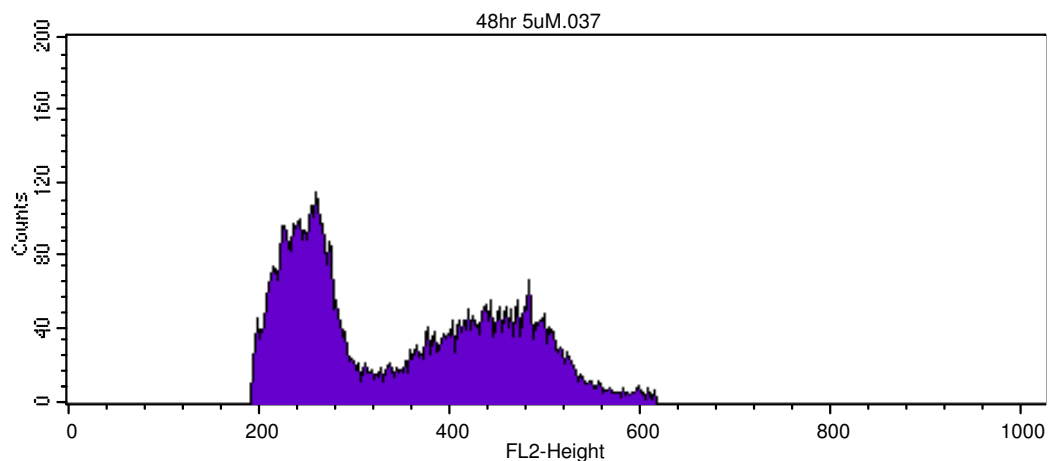


Figure 89: Histogram of MDA-MB-231 cells treated with 5μM lycopene for 48 hours.

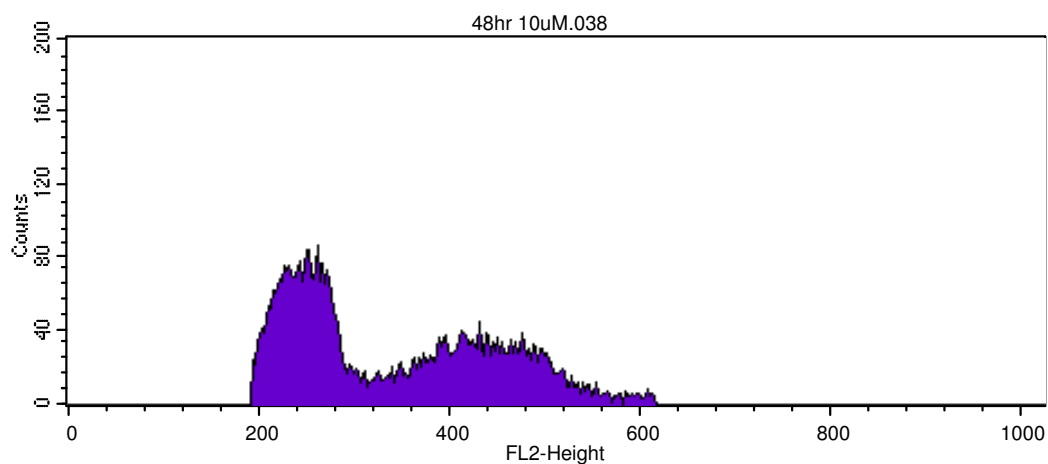


Figure 90: Histogram of MDA-MB-231 cells treated with 10μM lycopene for 48 hours.

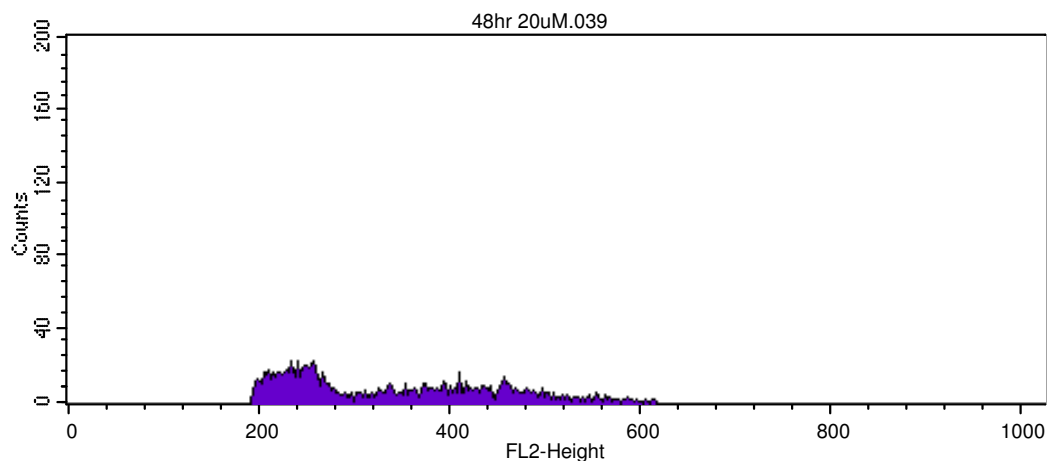


Figure 91: Histogram of MDA-MB-231 cells treated with 20μM lycopene for 48 hours.

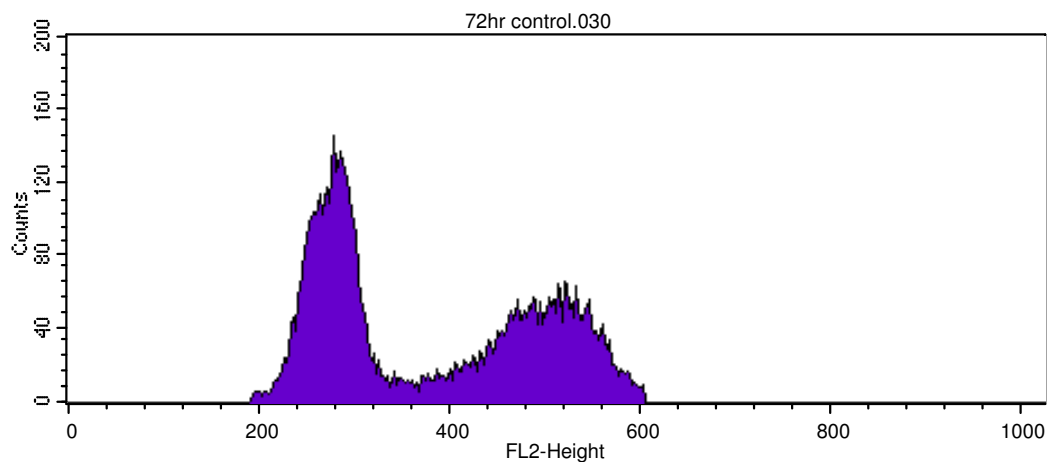


Figure 92: Histogram of MDA-MB-231/lycopene control cells treated with THF for 72 hours.

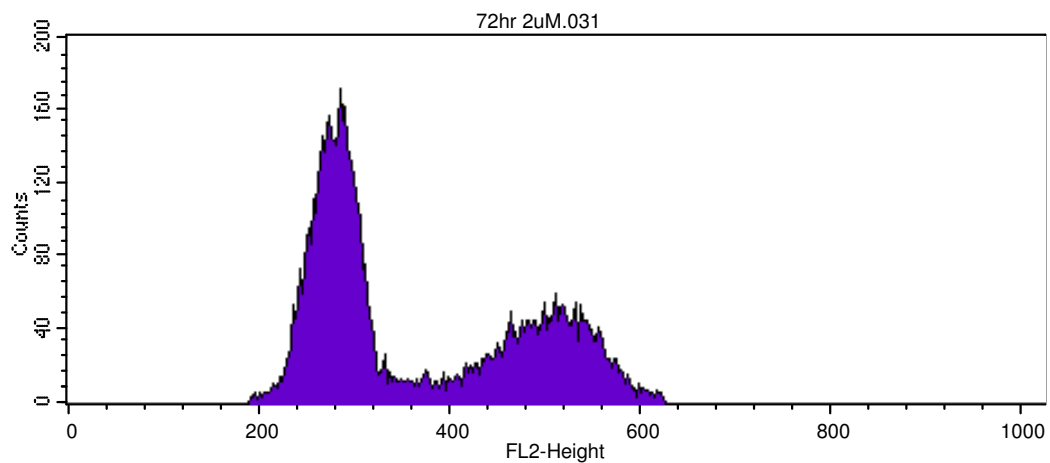


Figure 93: Histogram of MDA-MB-231 cells treated with 2µM lycopene for 72 hours.

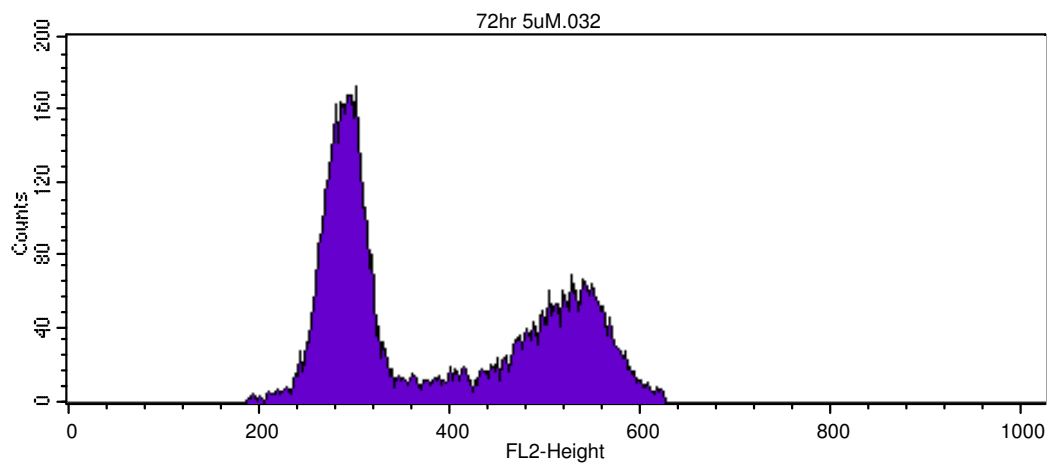


Figure 94: Histogram of MDA-MB-231 cells treated with 5µM lycopene for 72 hours.

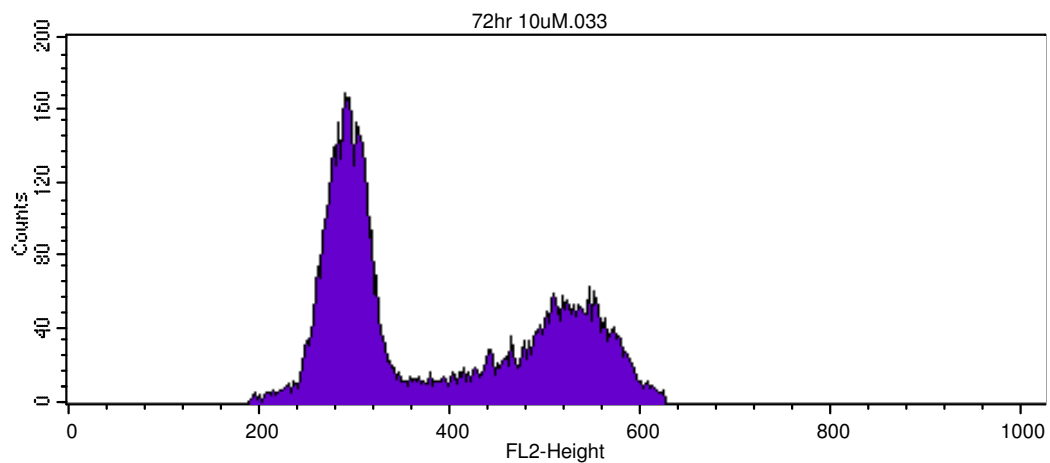


Figure 95: Histogram of MDA-MB-231 cells treated with 10μM lycopene for 72 hours.

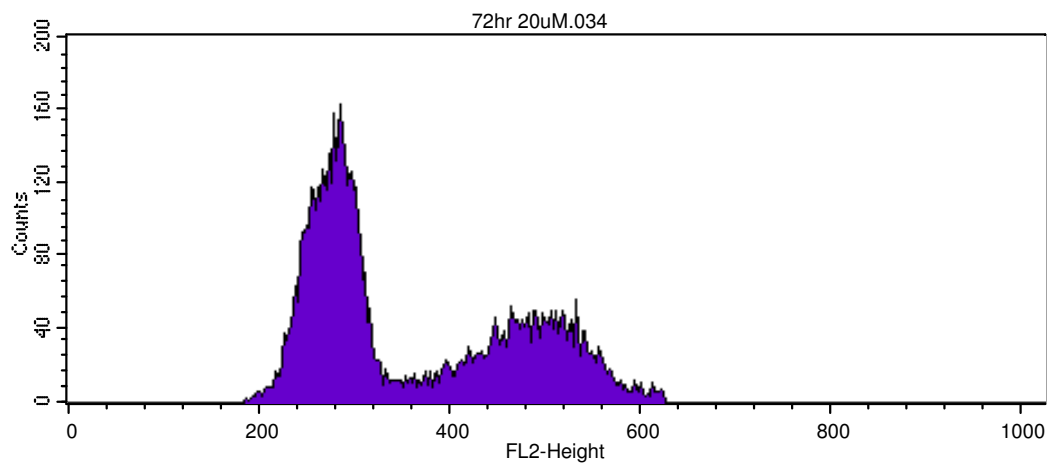


Figure 96: Histogram of MDA-MB-231 cells treated with 20μM lycopene for 72 hours.

MDA-MB-231/thalidomide

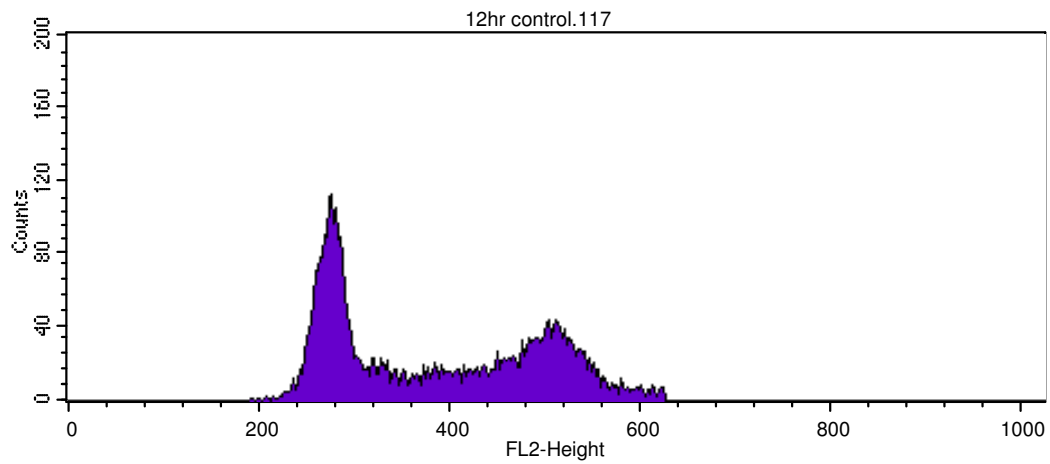


Figure 97: Histogram of MDA-MB-231/thalidomide control cells treated with DMSO for 12 hours.

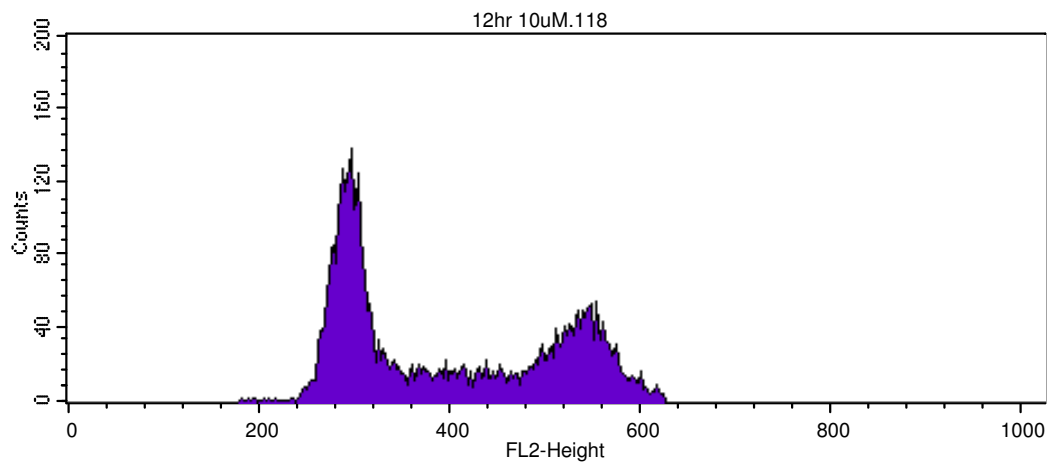


Figure 98: Histogram of MDA-MB-231 cells treated with 10µM thalidomide for 12 hours.

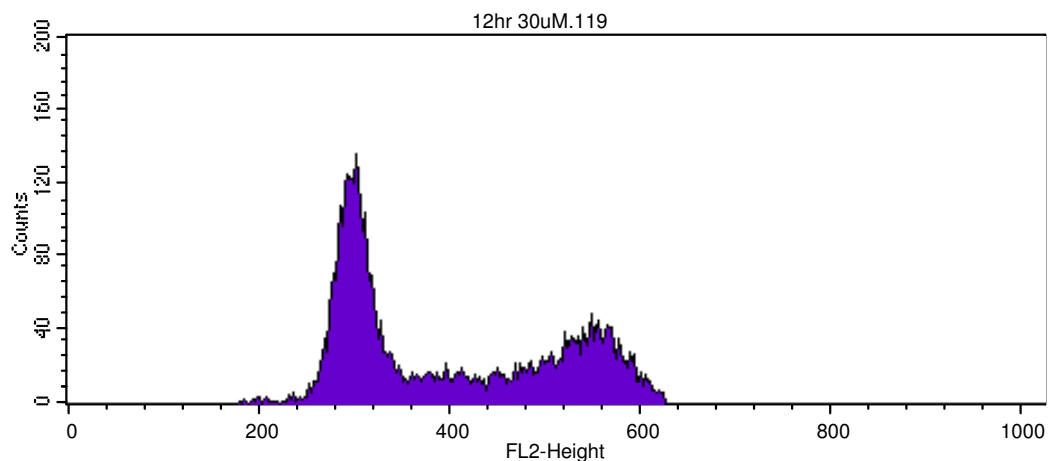


Figure 99: Histogram of MDA-MB-231 cells treated with 30μM thalidomide for 12 hours.

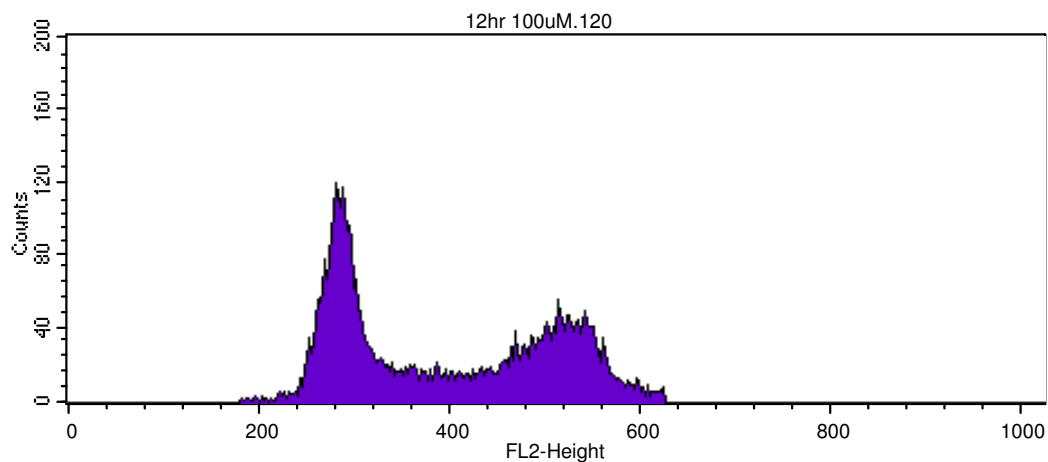


Figure 100: Histogram of MDA-MB-231 cells treated with 100μM thalidomide for 12 hours.

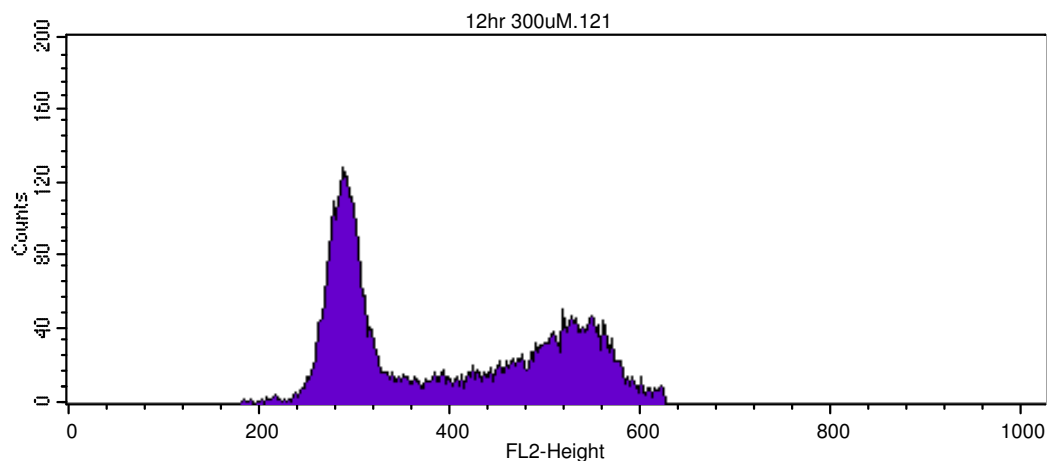


Figure 101: Histogram of MDA-MB-231 cells treated with 300μM thalidomide for 12 hours.

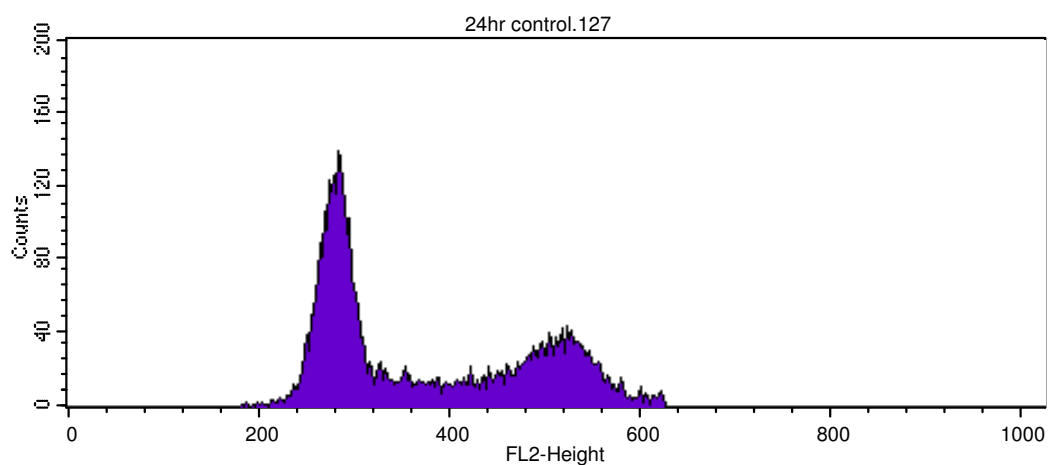


Figure 102: Histogram of MDA-MB-231/thalidomide control cells treated with DMSO for 24 hours.

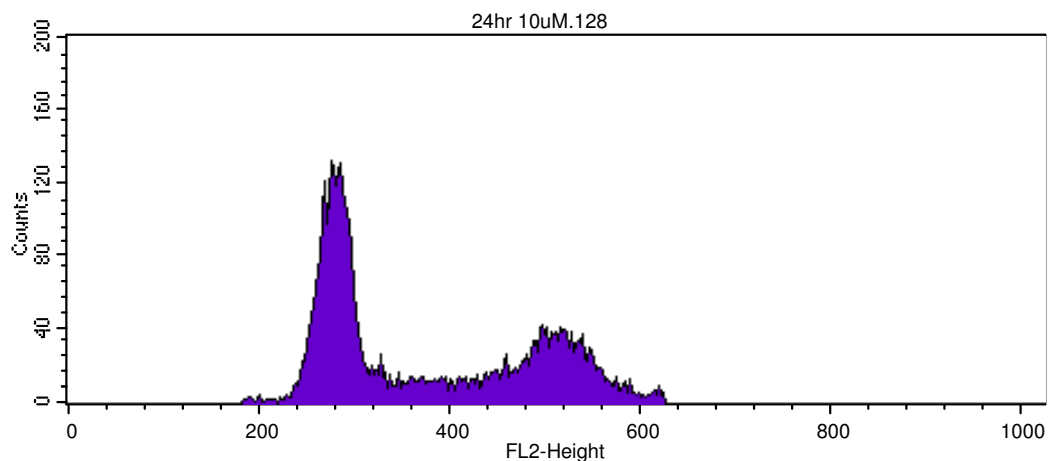


Figure 103: Histogram of MDA-MB-231 cells treated with 10 μ M thalidomide for 24 hours.

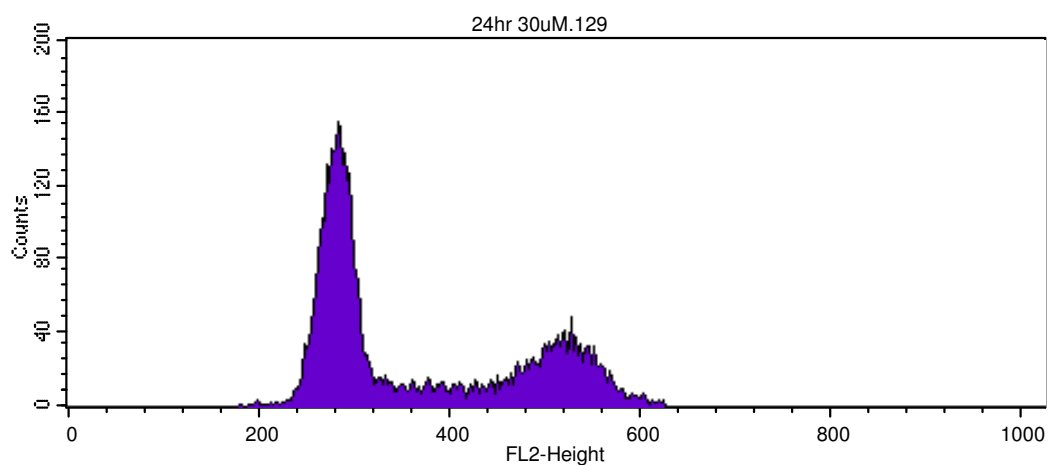


Figure 104: Histogram of MDA-MB-231 cells treated with 30 μ M thalidomide for 24 hours.

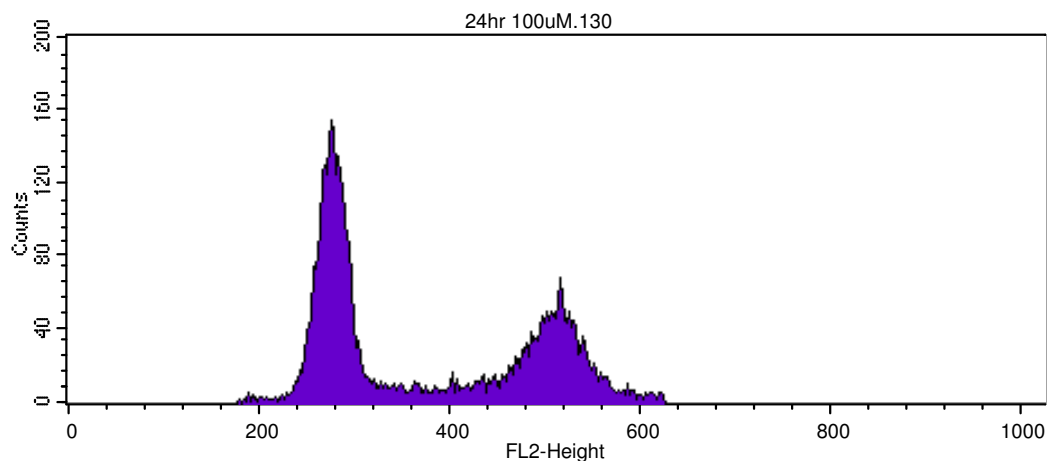


Figure 105: Histogram of MDA-MB-231 cells treated with 100 μ M thalidomide for 24 hours.

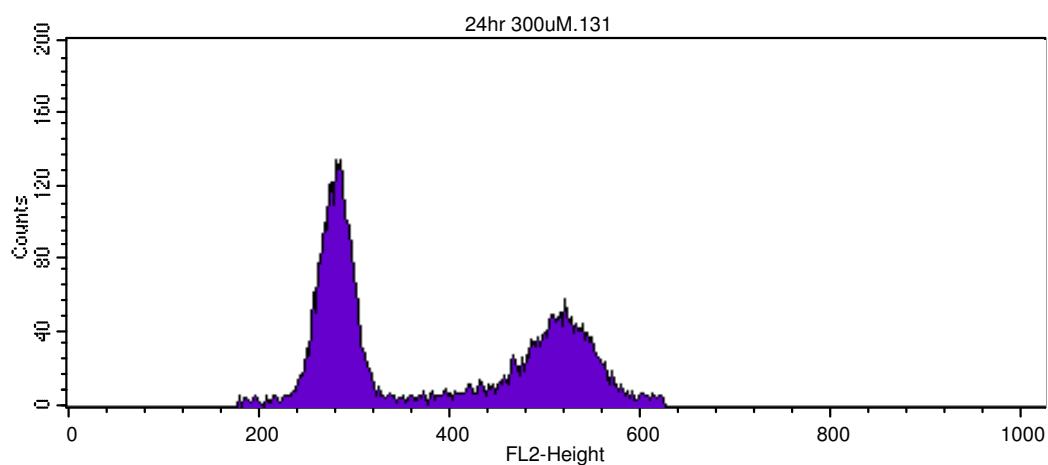


Figure 106: Histogram of MDA-MB-231 cells treated with 300 μ M thalidomide for 24 hours.

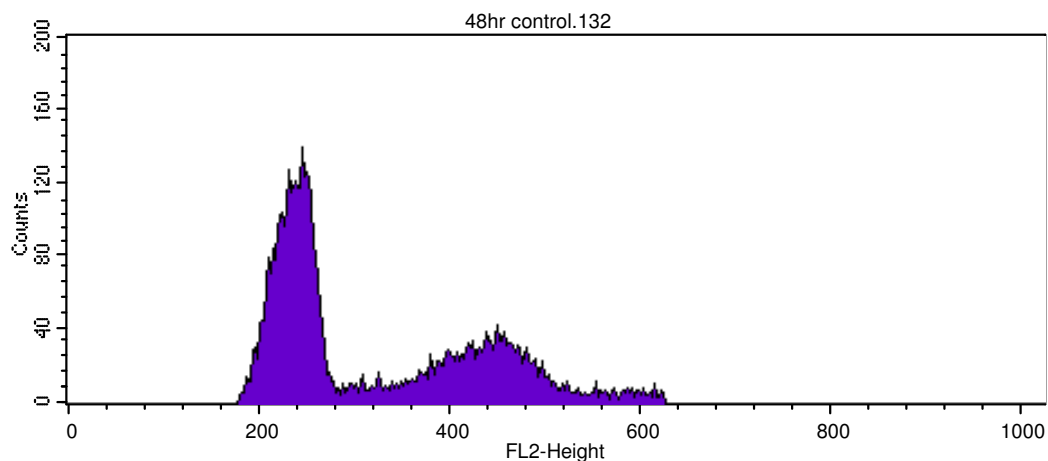


Figure 107: Histogram of MDA-MB-231/thalidomide control cells treated with DMSO for 48 hours.

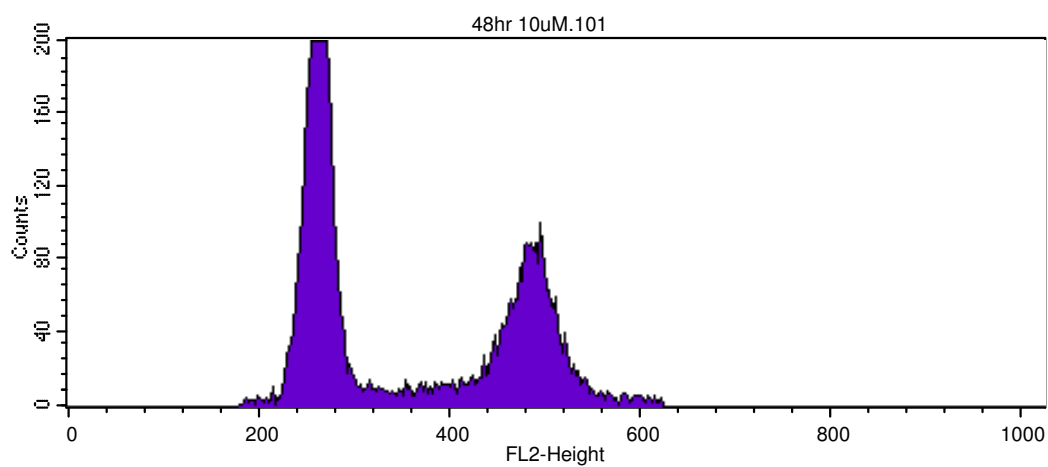


Figure 108: Histogram of MDA-MB-231 cells treated with 10μM thalidomide for 48 hours.

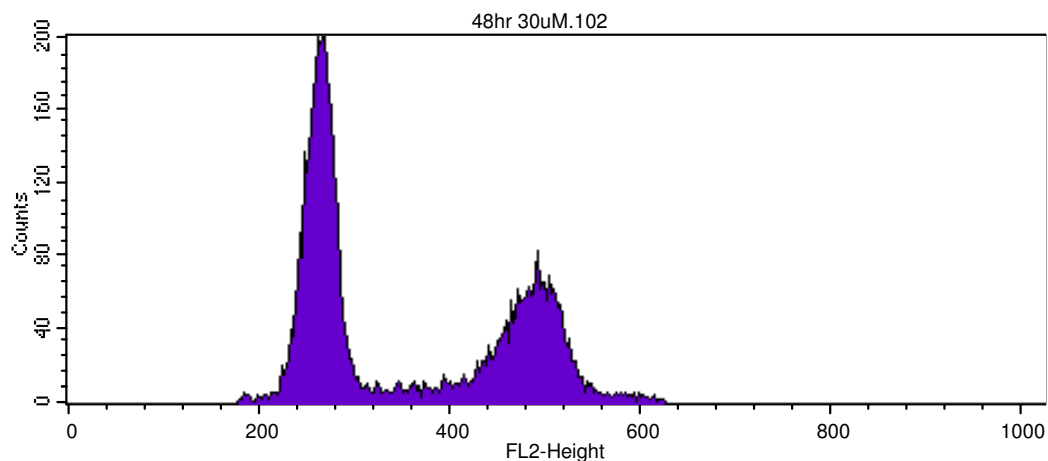


Figure 109: Histogram of MDA-MB-231 cells treated with 30μM thalidomide for 48 hours.

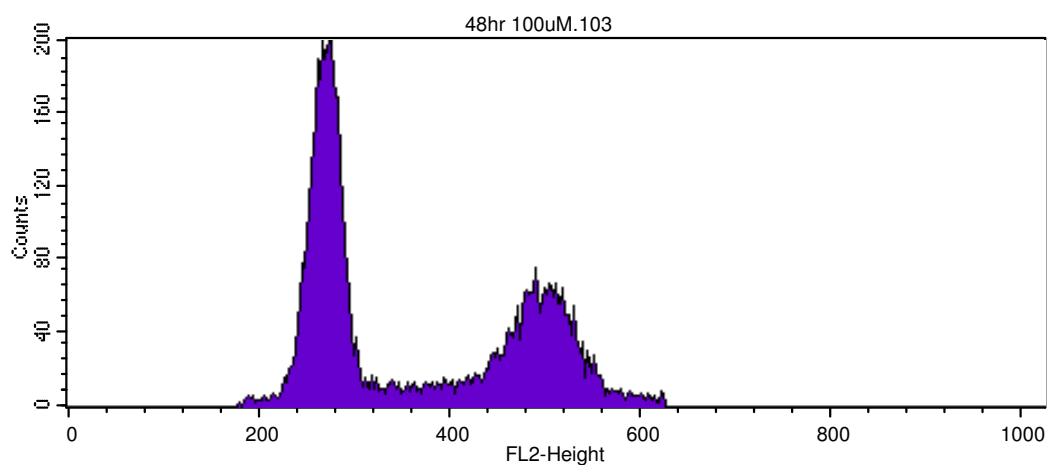


Figure 110: Histogram of MDA-MB-231 cells treated with 100μM thalidomide for 48 hours.

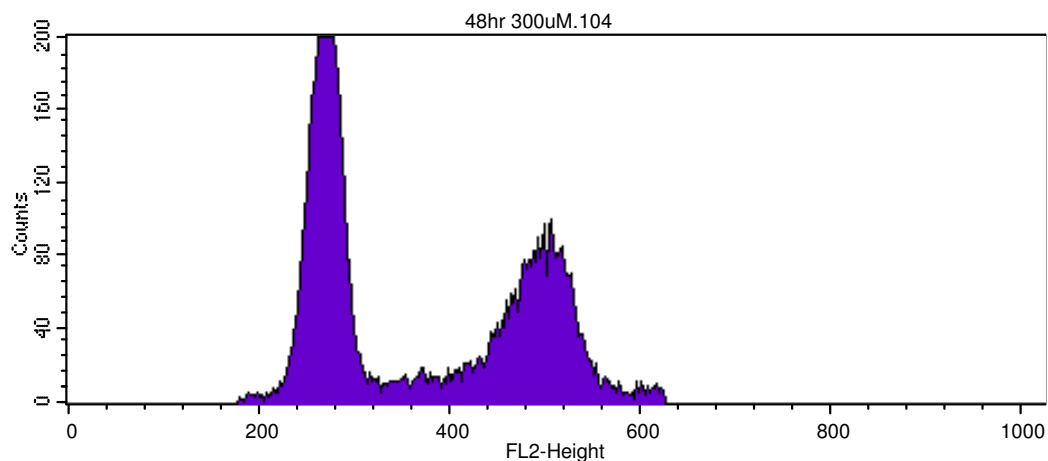


Figure 111: Histogram of MDA-MB-231 cells treated with 300μM thalidomide for 48 hours.

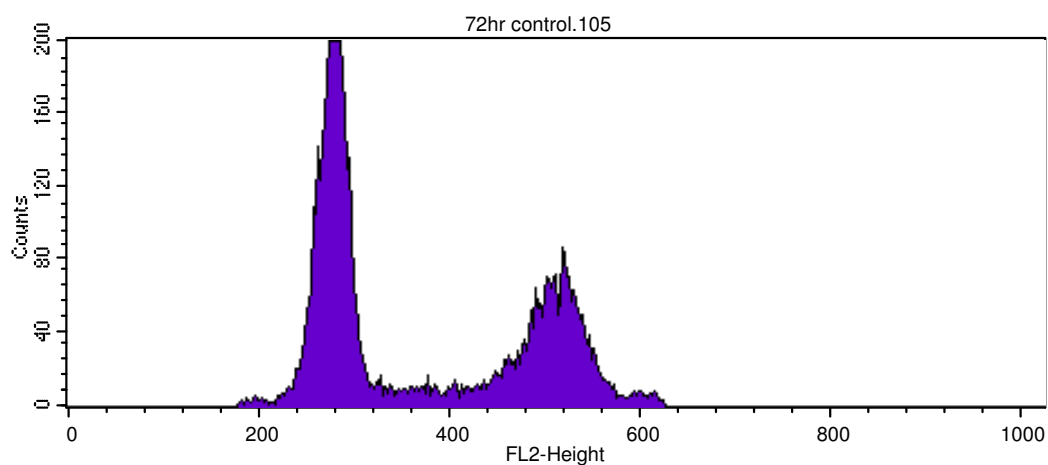


Figure 112: Histogram of MDA-MB-231/thalidomide control cells treated with DMSO for 72 hours.

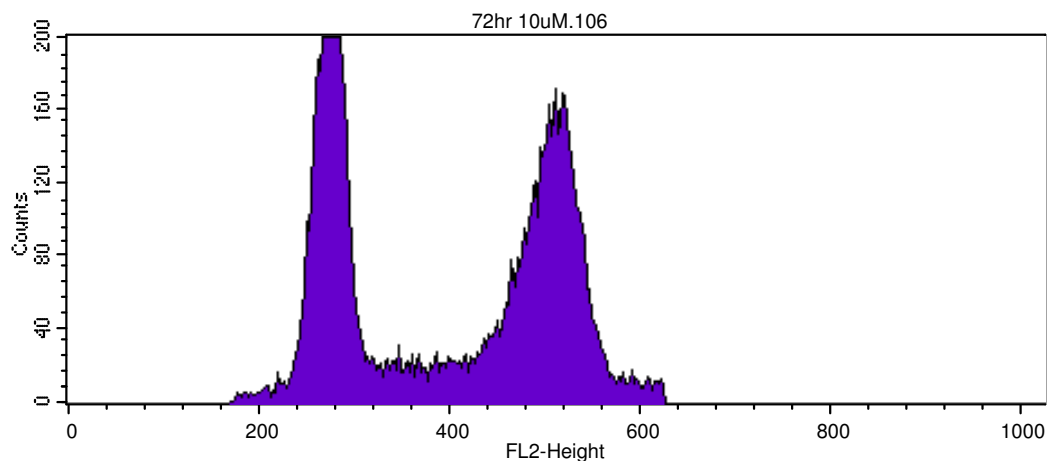


Figure 113: Histogram of MDA-MB-231 cells treated with 10 μ M thalidomide for 72 hours.

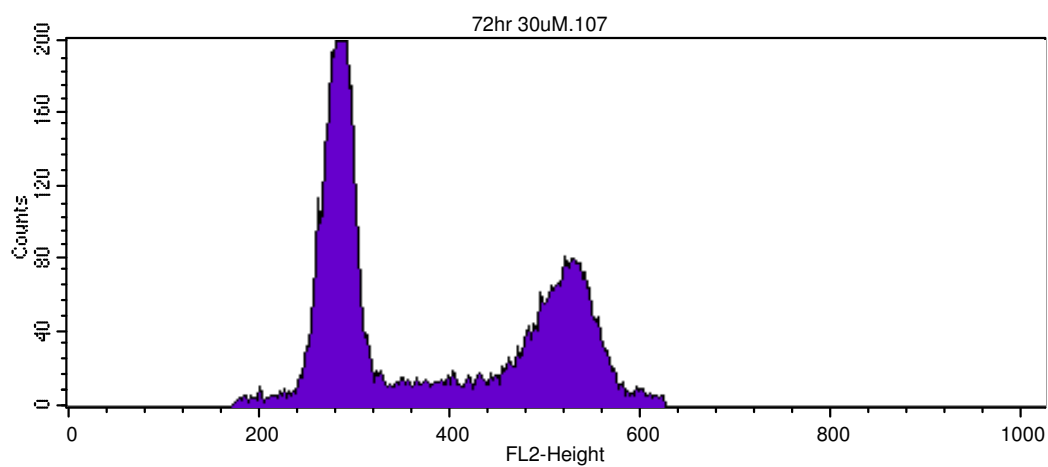


Figure 114: Histogram of MDA-MB-231 cells treated with 30 μ M thalidomide for 72 hours.

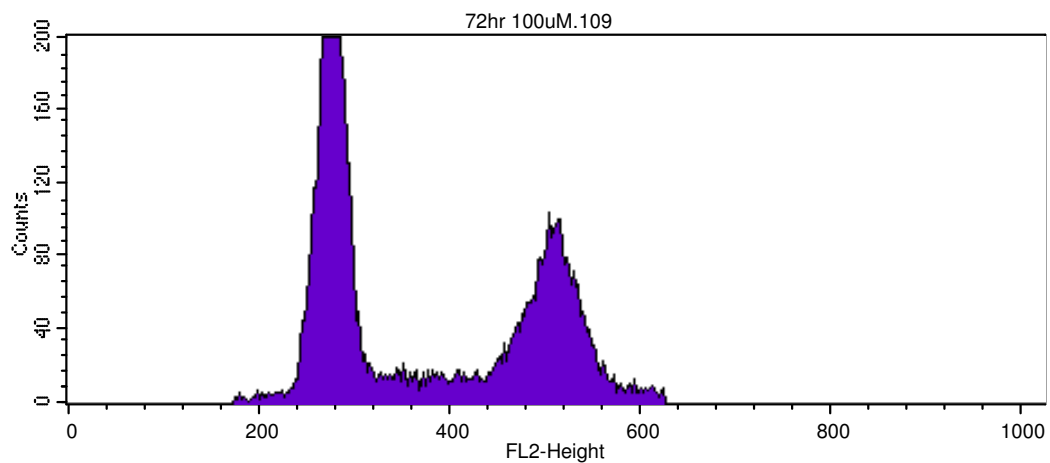


Figure 115: Histogram of MDA-MB-231 cells treated with 100μM thalidomide for 72 hours.

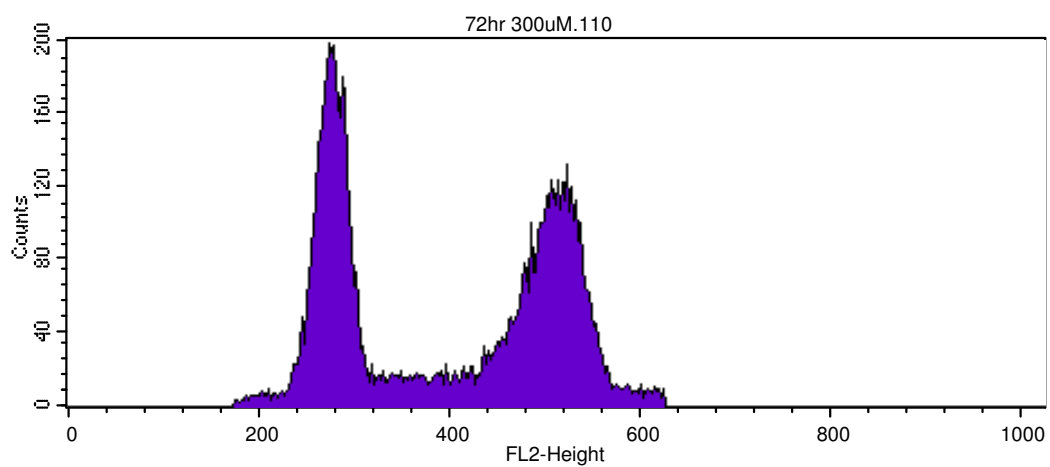


Figure 116: Histogram of MDA-MB-231 cells treated with 300μM thalidomide for 72 hours.

184A1/lycopene

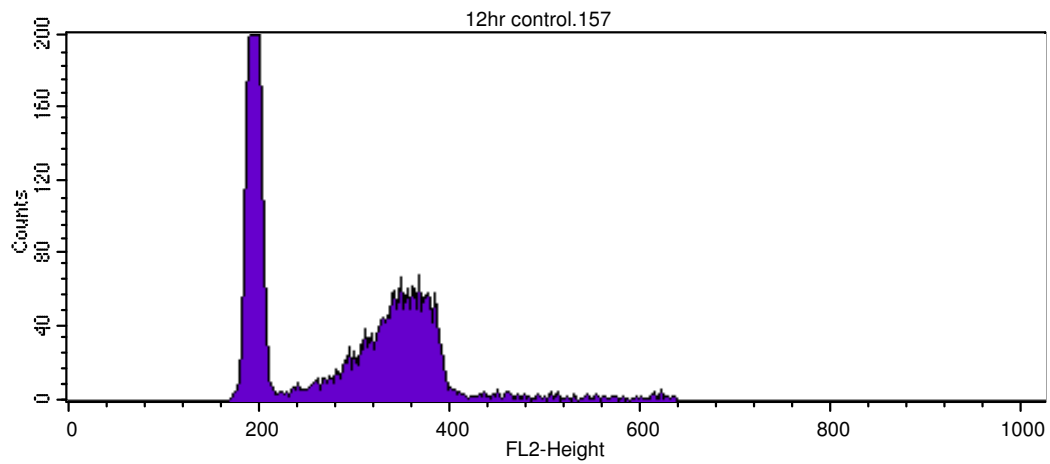


Figure 117: Histogram of 184A1/lycopene control cells treated with THF for 12 hours.

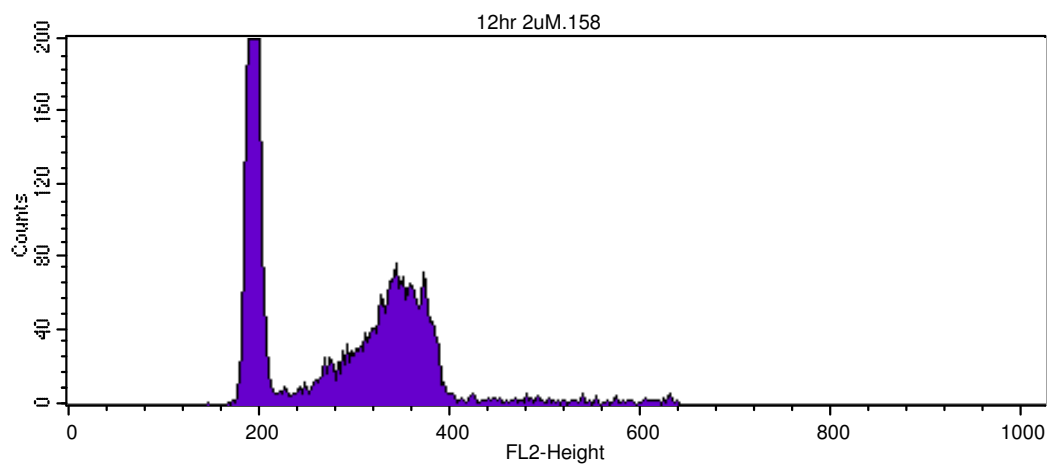


Figure 118: Histogram of 184A1 cells treated with 2μM lycopene for 12 hours.

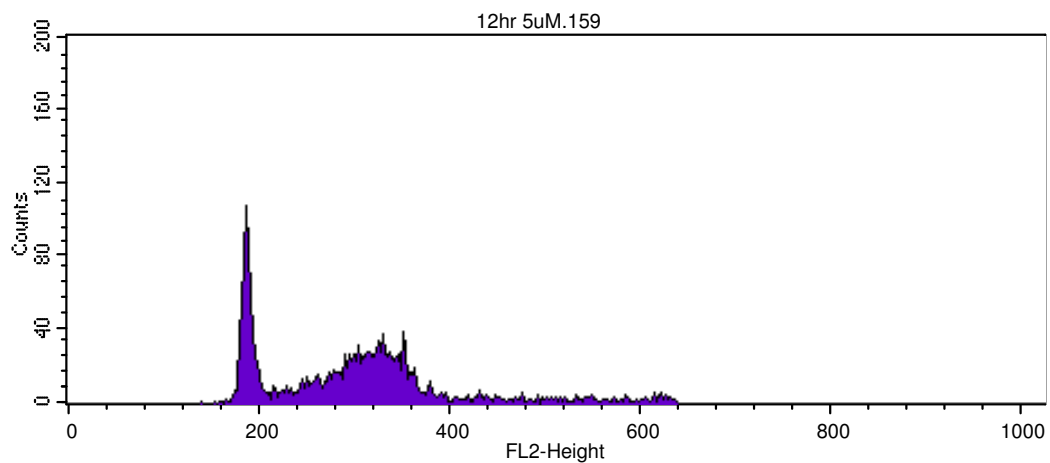


Figure 119: Histogram of 184A1 cells treated with 5μM lycopene for 12 hours.

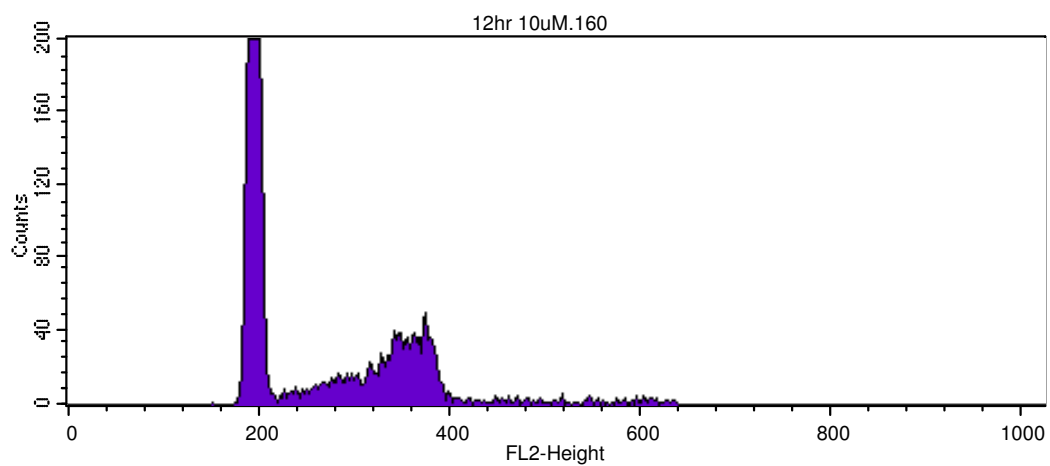


Figure 120: Histogram of 184A1 cells treated with 10μM lycopene for 12 hours.

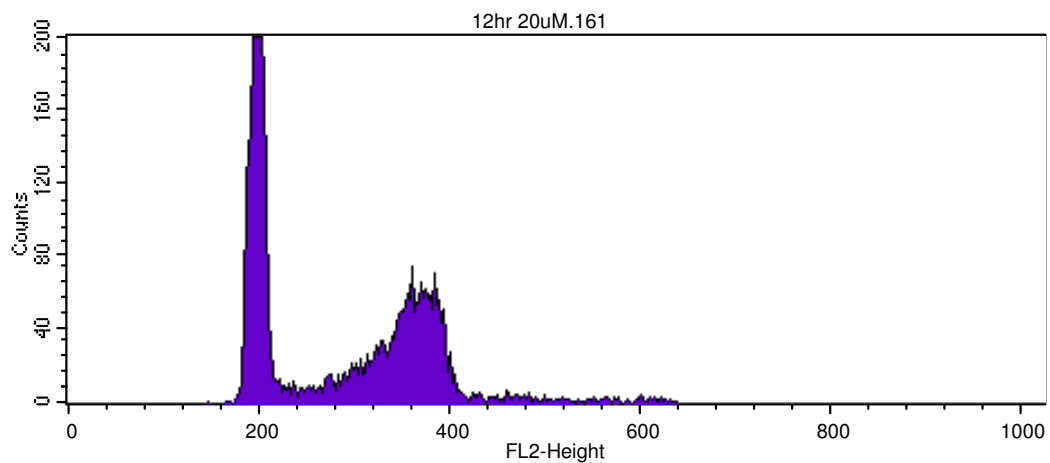


Figure 121: Histogram of 184A1 cells treated with 20μM lycopene for 12 hours.

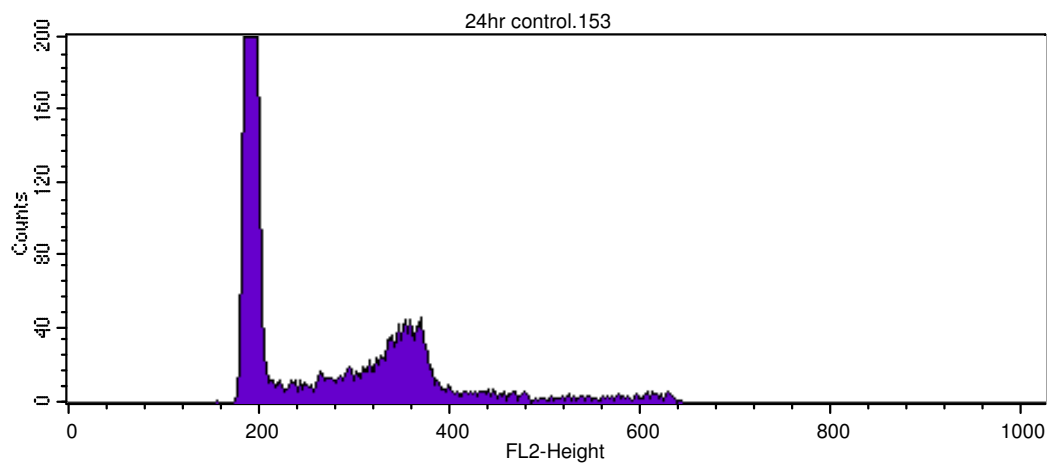


Figure 122: Histogram of 184A1/lycopene control cells treated with THF for 24 hours.

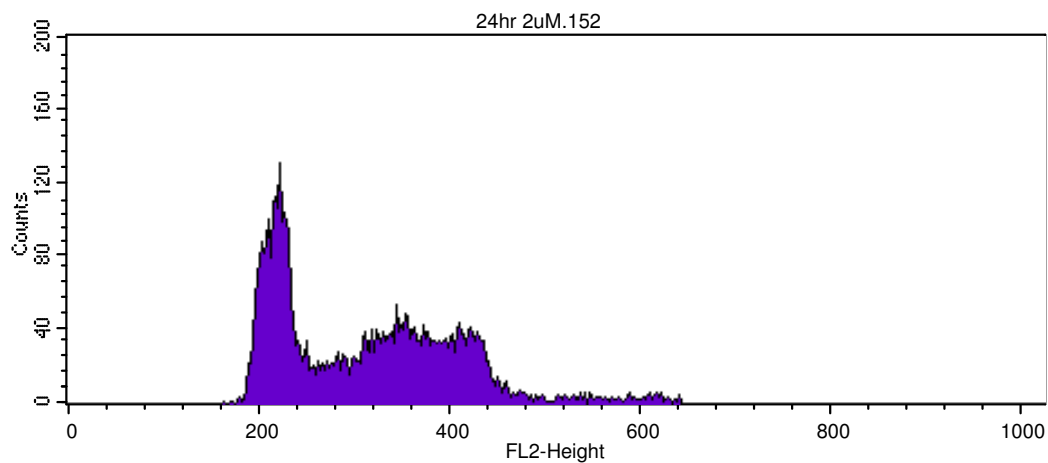


Figure 123: Histogram of 184A1 cells treated with 2μM lycopene for 24 hours.

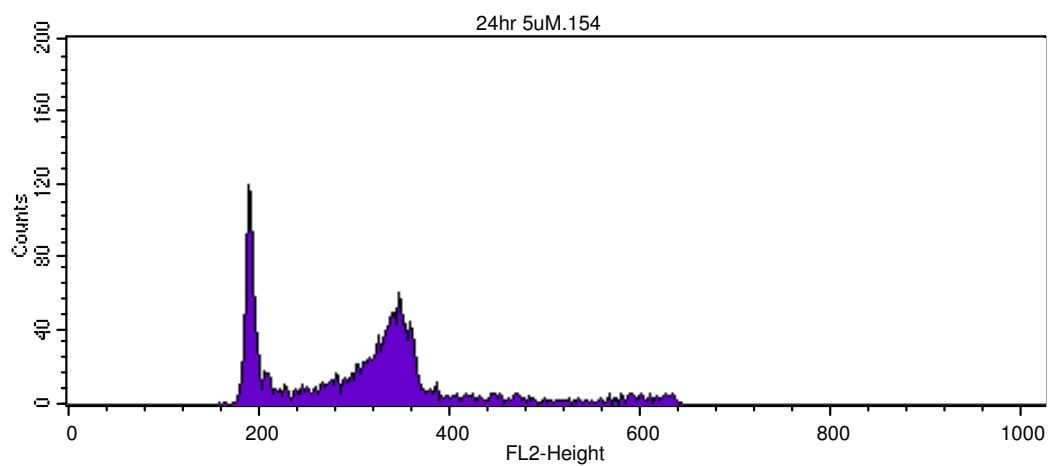


Figure 124: Histogram of 184A1 cells treated with 5μM lycopene for 24 hours.

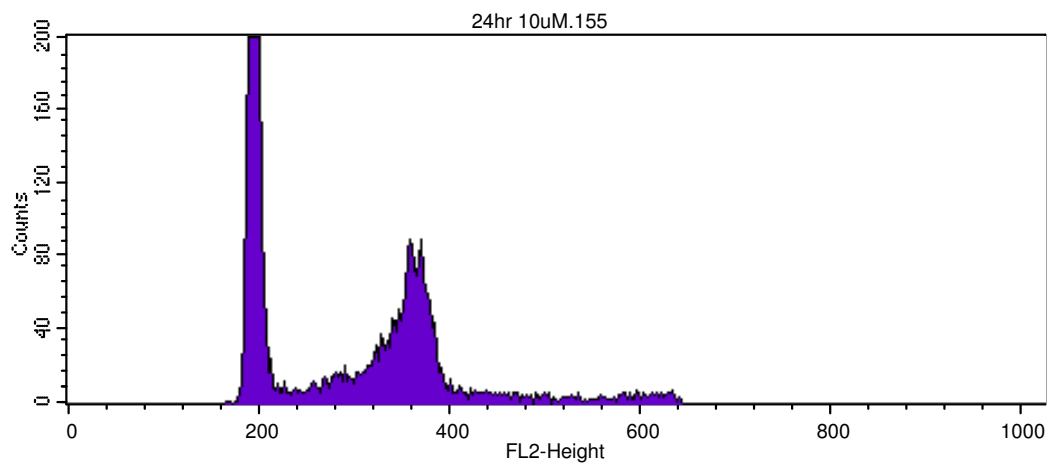


Figure 125: Histogram of 184A1 cells treated with 10μM lycopene for 24 hours.

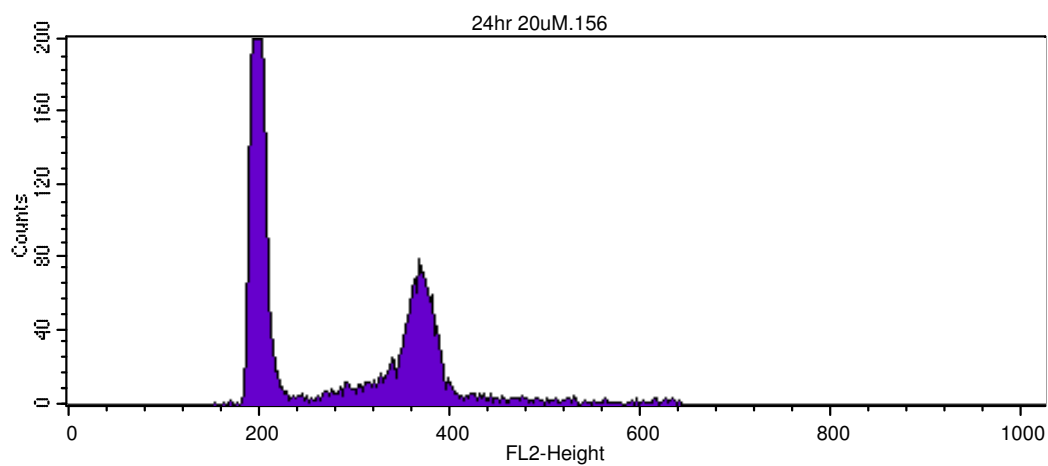


Figure 126: Histogram of 184A1 cells treated with 20μM lycopene for 24 hours.

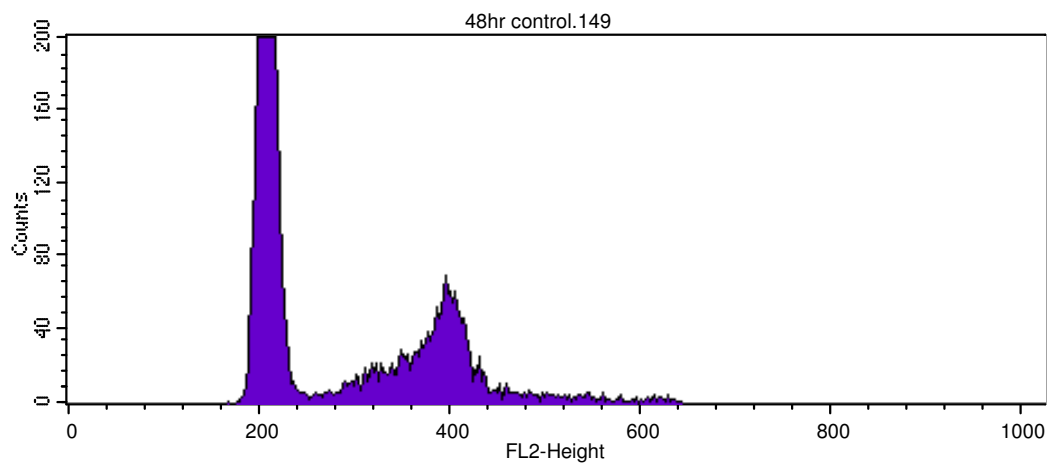


Figure 127: Histogram of 184A1/lycopene control cells treated with THF for 48 hours.

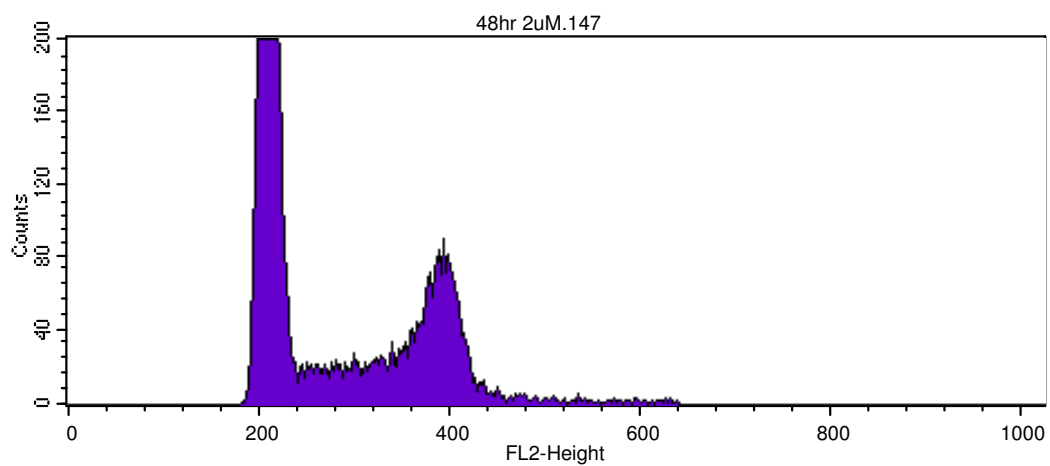


Figure 128: Histogram of 184A1 cells treated with 2 μ M lycopene for 48 hours.

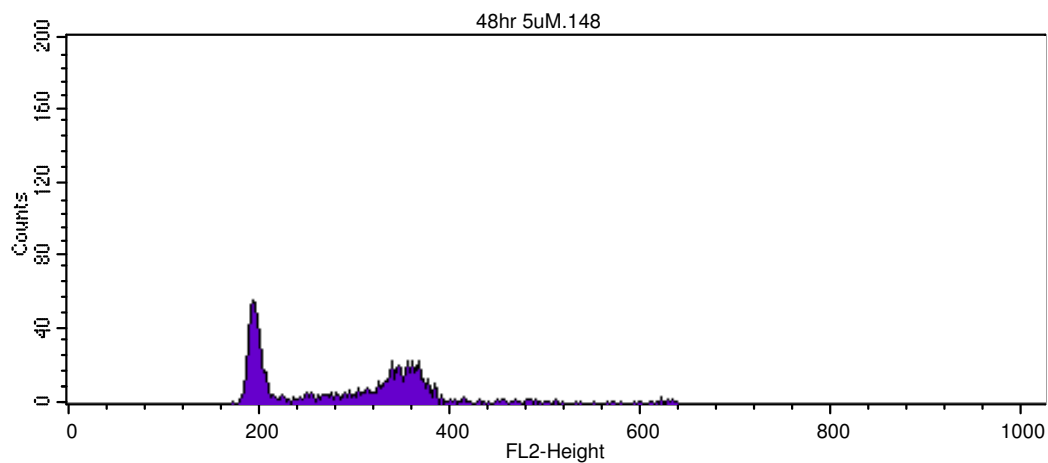


Figure 129: Histogram of 184A1 cells treated with 5μM lycopene for 48 hours.

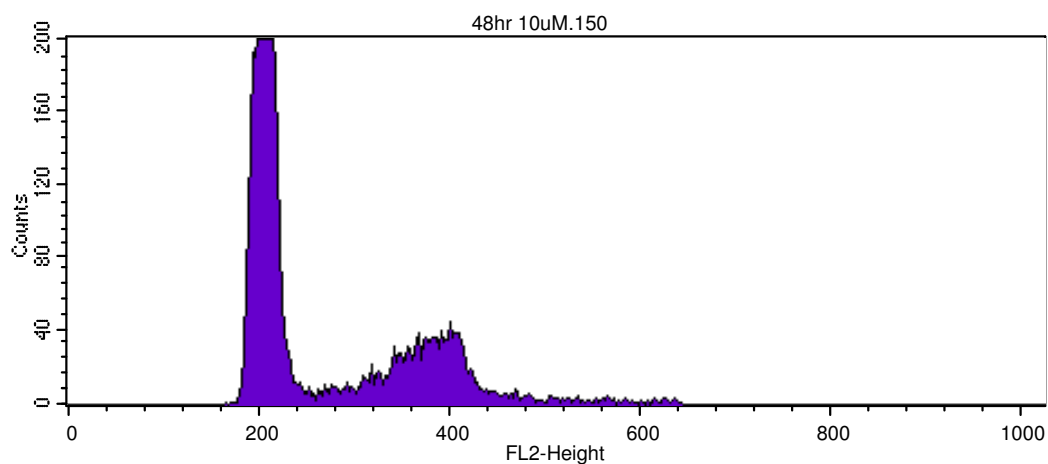


Figure 130: Histogram of 184A1 cells treated with 10μM lycopene for 48 hours.

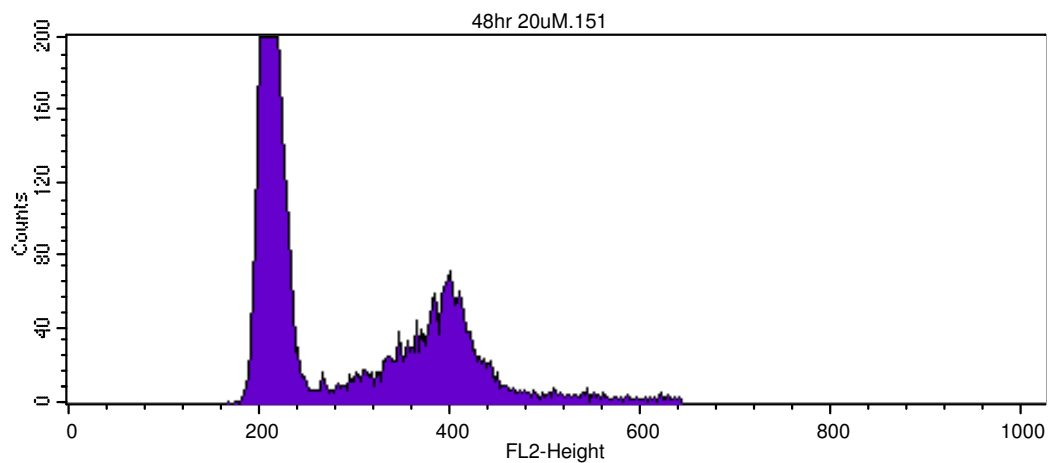


Figure 131: Histogram of 184A1 cells treated with 20 μ M lycopene for 48 hours.

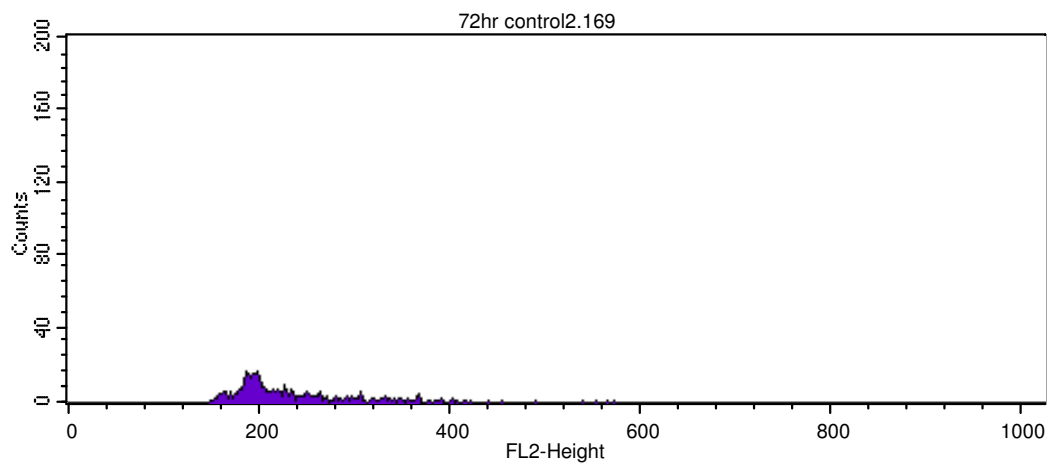


Figure 132: Histogram of 184A1/lycopene control cells treated with THF for 72 hours.

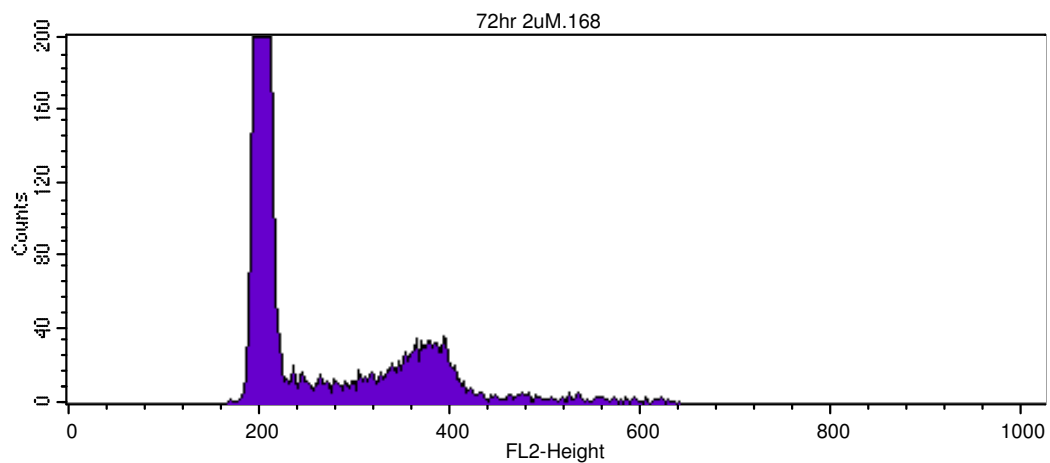


Figure 133: Histogram of 184A1 cells treated with 2 μ M lycopene for 72 hours.

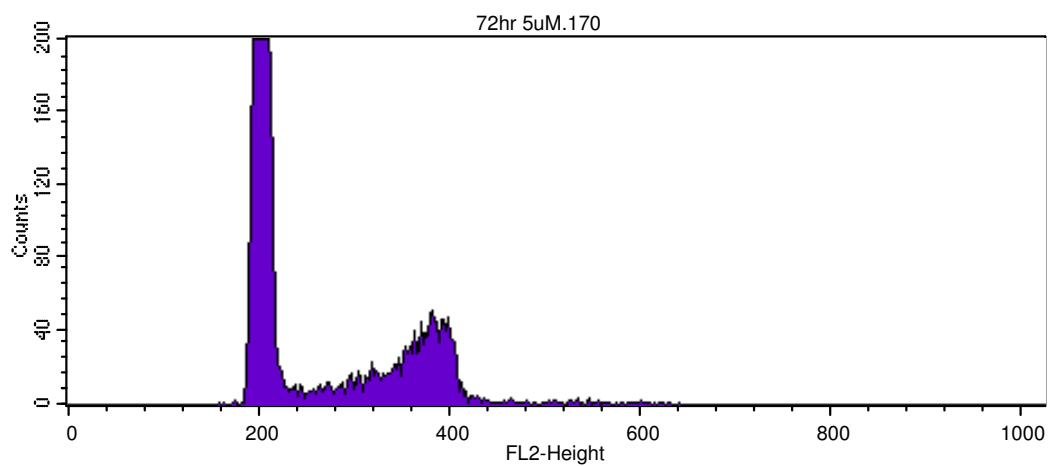


Figure 134: Histogram of 184A1 cells treated with 5 μ M lycopene for 72 hours.

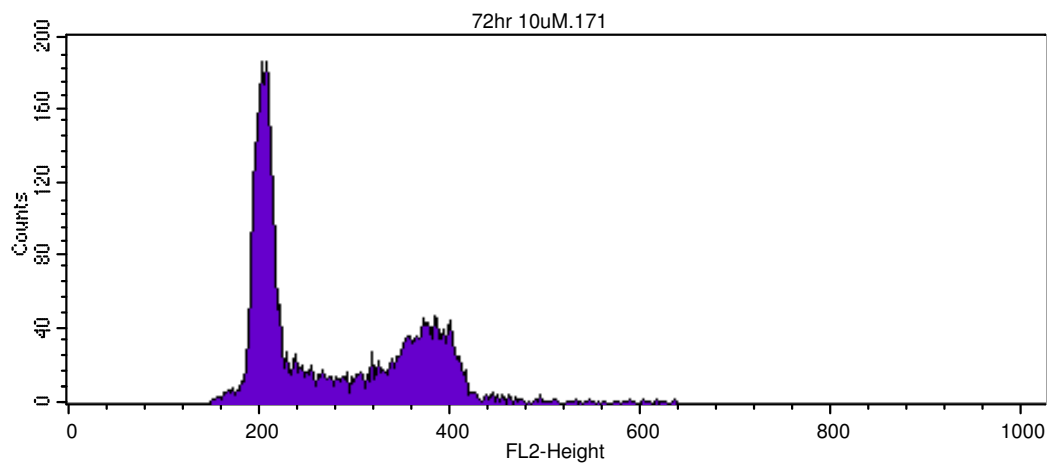


Figure 135: Histogram of 184A1 cells treated with 10µM lycopene for 72 hours.

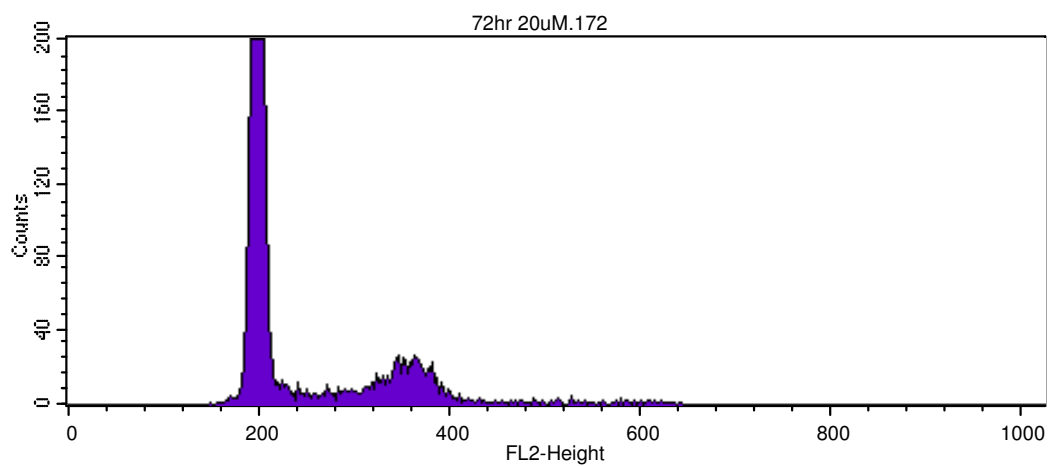


Figure 136: Histogram of 184A1 cells treated with 20µM lycopene for 72 hours.

184A1/thalidomide

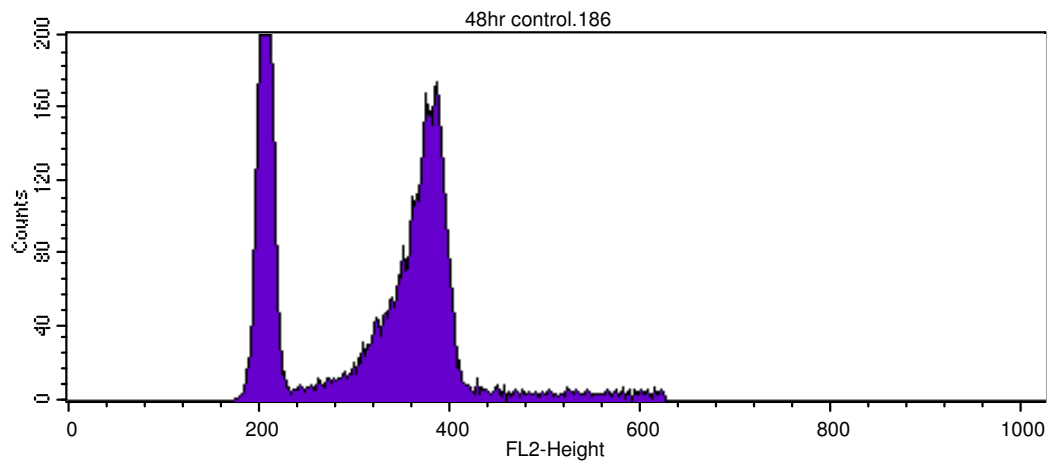


Figure 137: Histogram of 184A1/thalidomide control cells treated with DMSO for 48 hours.

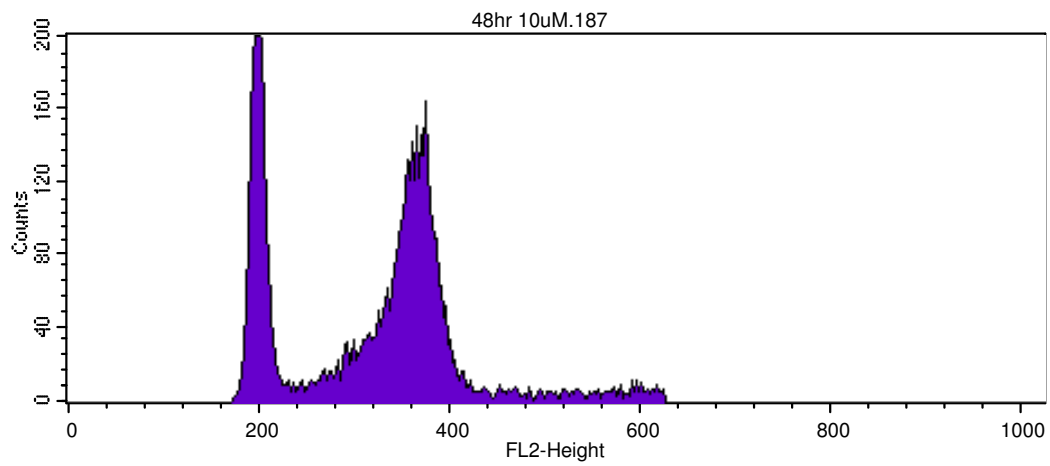


Figure 138: Histogram of 184A1 cells treated with 10 μM thalidomide for 48 hours.

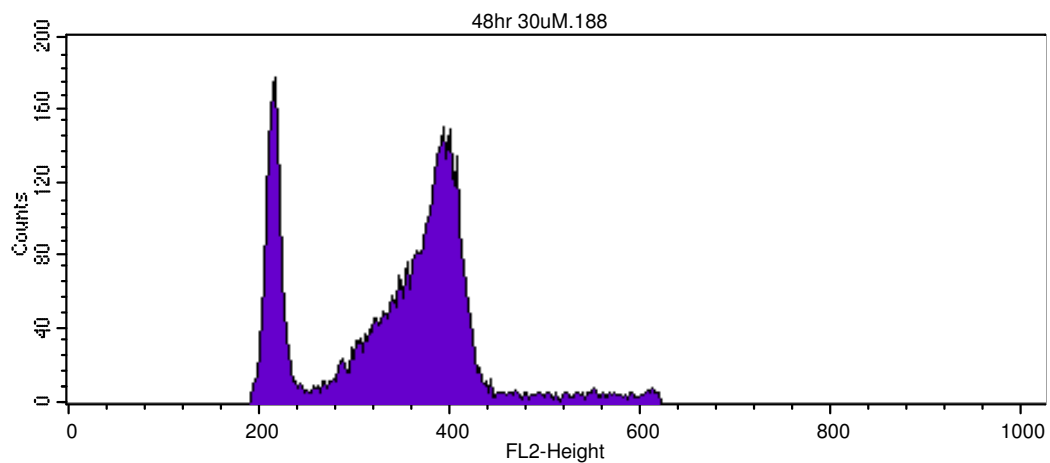


Figure 139: Histogram of 184A1 cells treated with 30 μ M thalidomide for 48 hours.

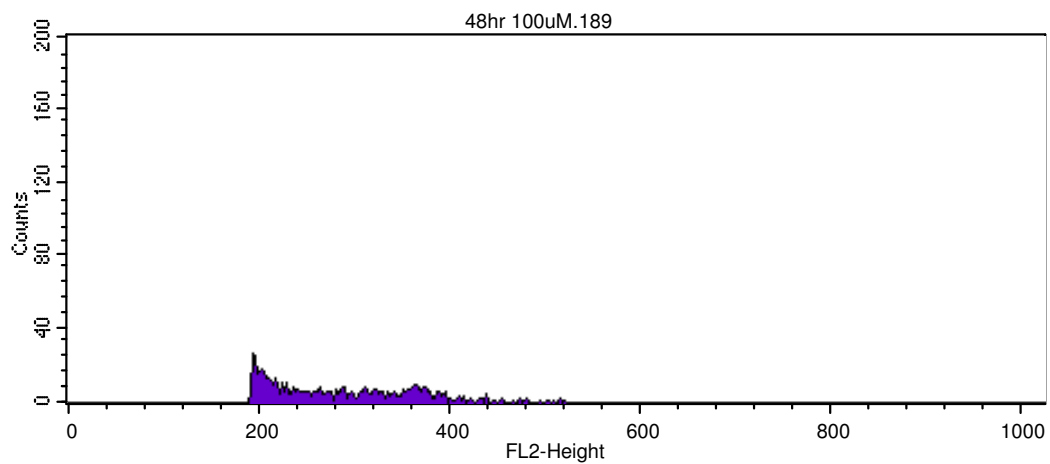


Figure 140: Histogram of 184A1 cells treated with 100 μ M thalidomide for 48 hours.

MODFIT

HT-29/Curcumin

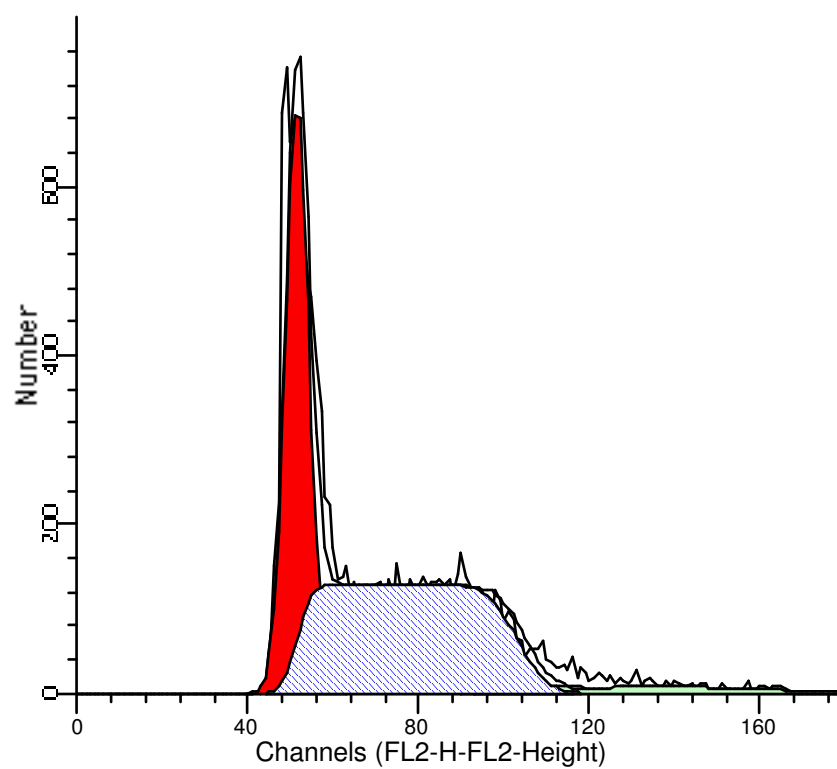


Figure 141: Histogram of HT-29/curcumin control cells treated with DMSO for 12 hours.

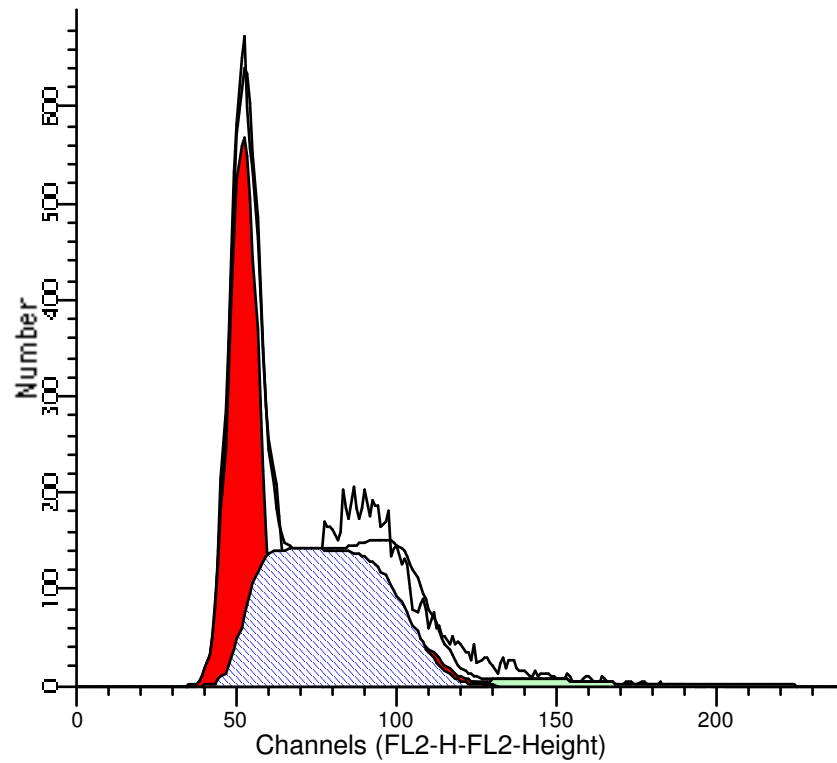


Figure 142: Histogram of HT-29 cells treated with 25µM curcumin for 12 hours.

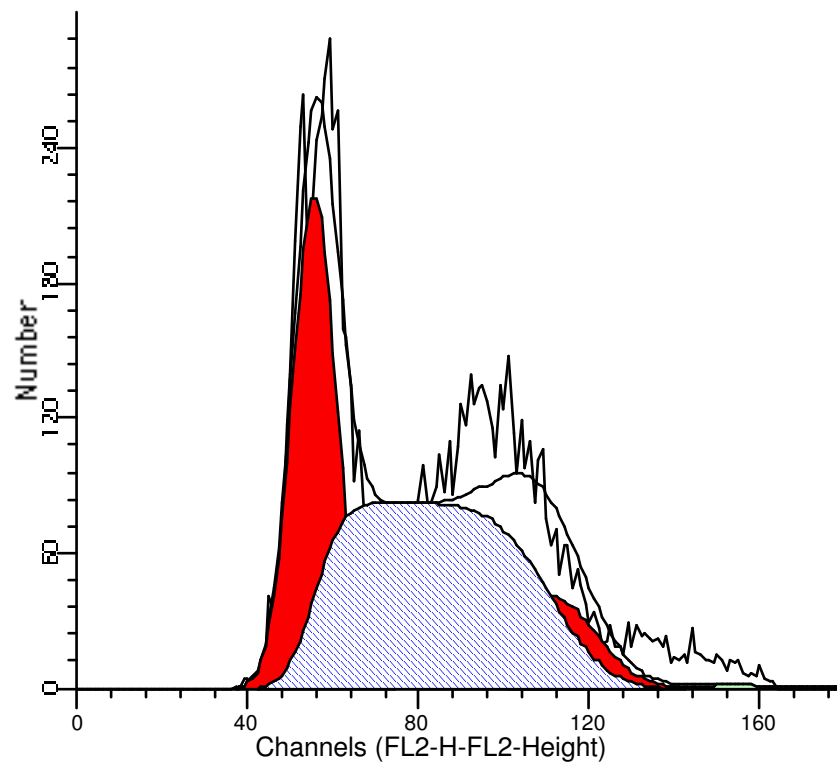


Figure 143: Histogram of HT-29 cells treated with 50µM curcumin for 12 hours.

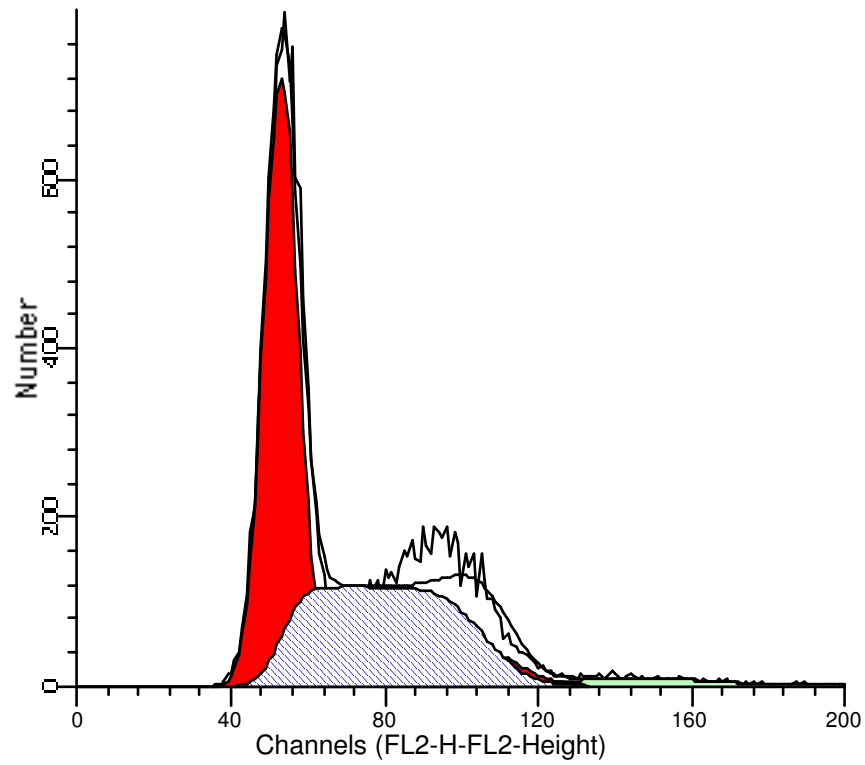


Figure 144: Histogram of HT-29 cells treated with 75µM curcumin for 12 hours.

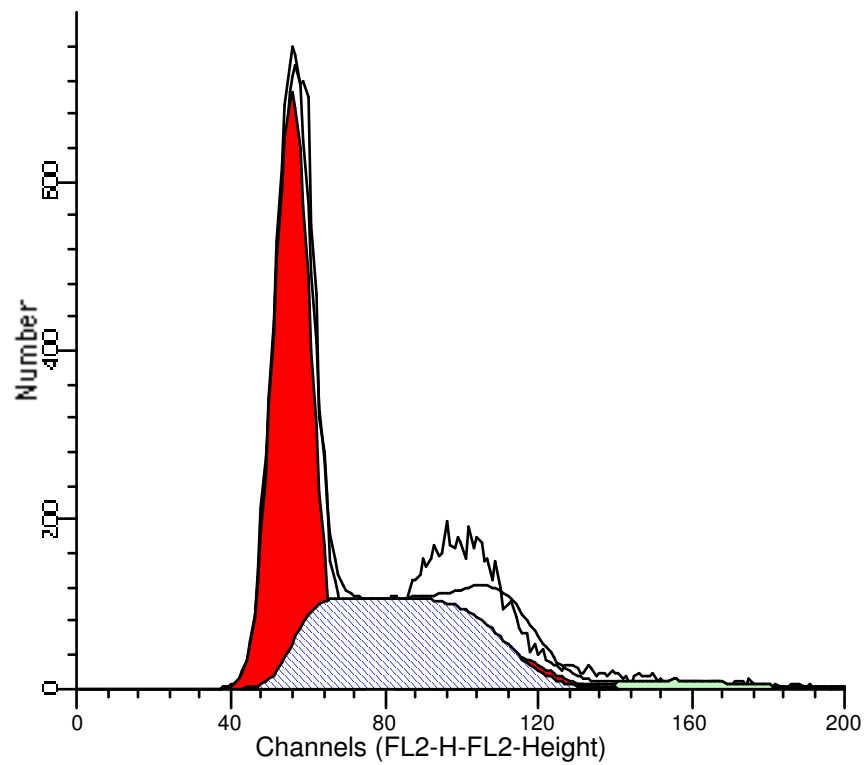


Figure 145: Histogram of HT-29 cells treated with 100µM curcumin for 12 hours.

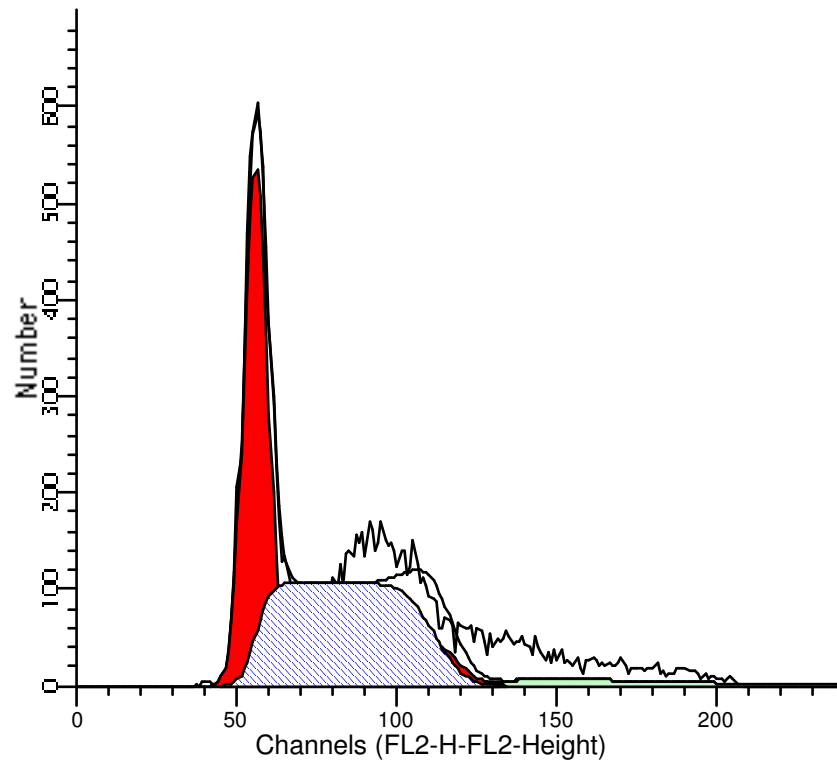


Figure 146: Histogram of HT-29/curcumin control cells treated with DMSO for 24 hours.

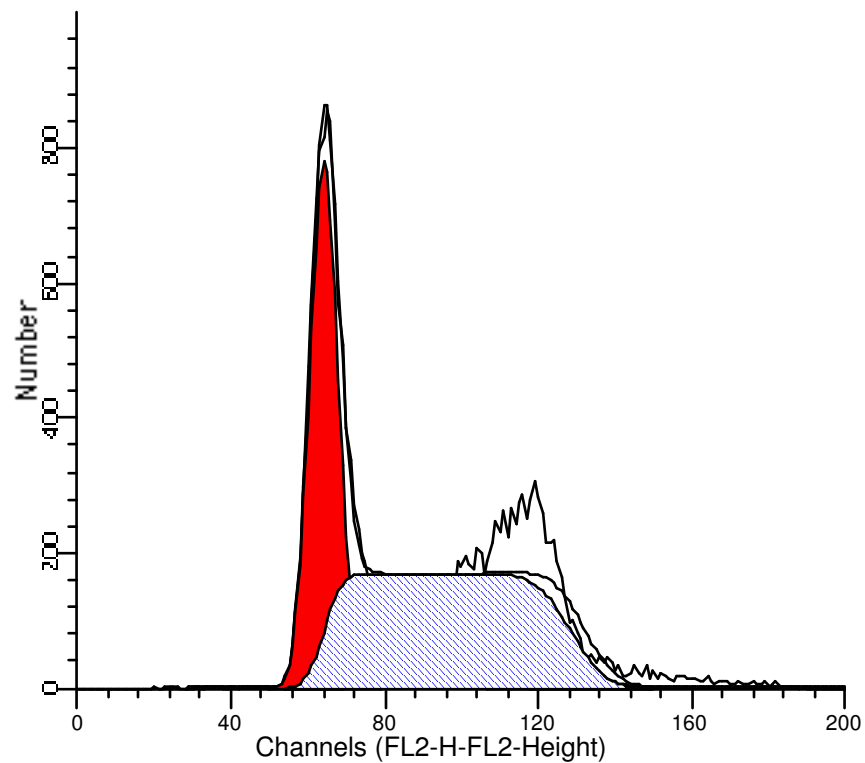


Figure 147: Histogram of HT-29 cells treated with 25µM curcumin for 24 hours.

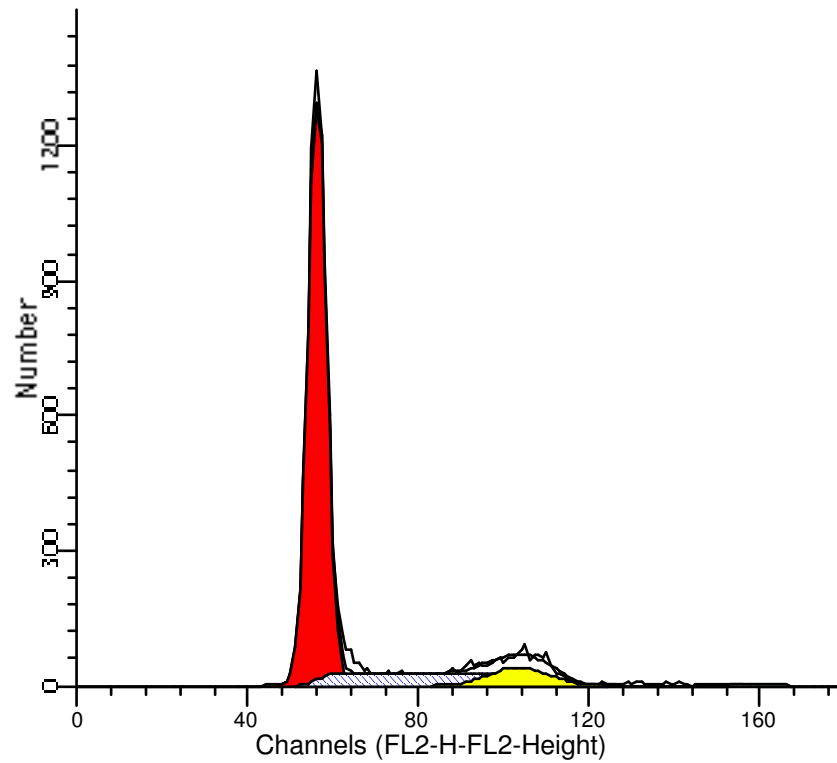


Figure 148: Histogram of HT-29/curcumin control cells treated with DMSO for 48 hours.

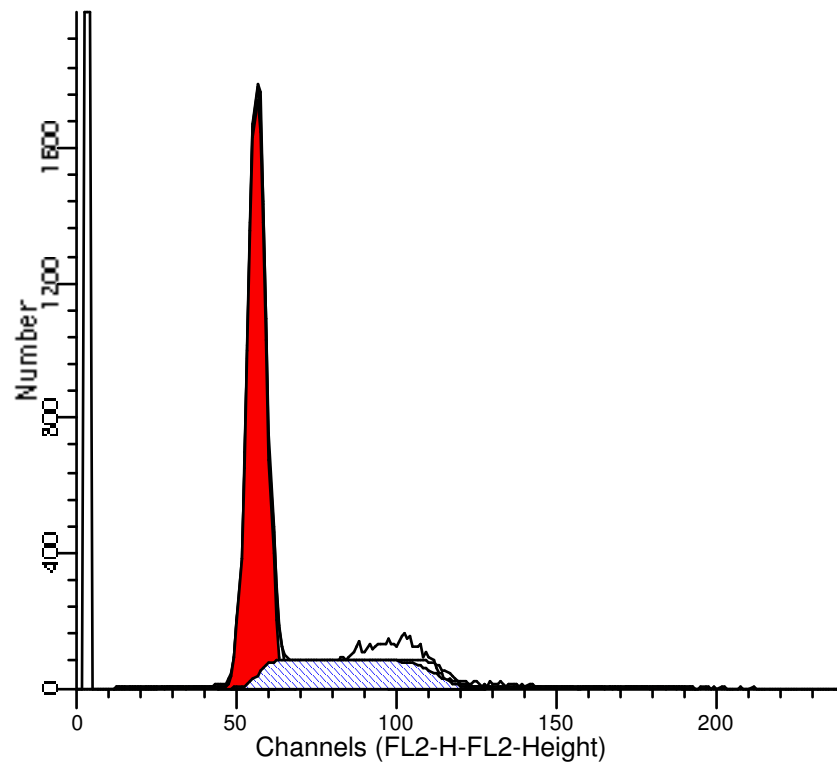


Figure 149: Histogram of HT-29 cells treated with 25 μ M curcumin for 48 hours.

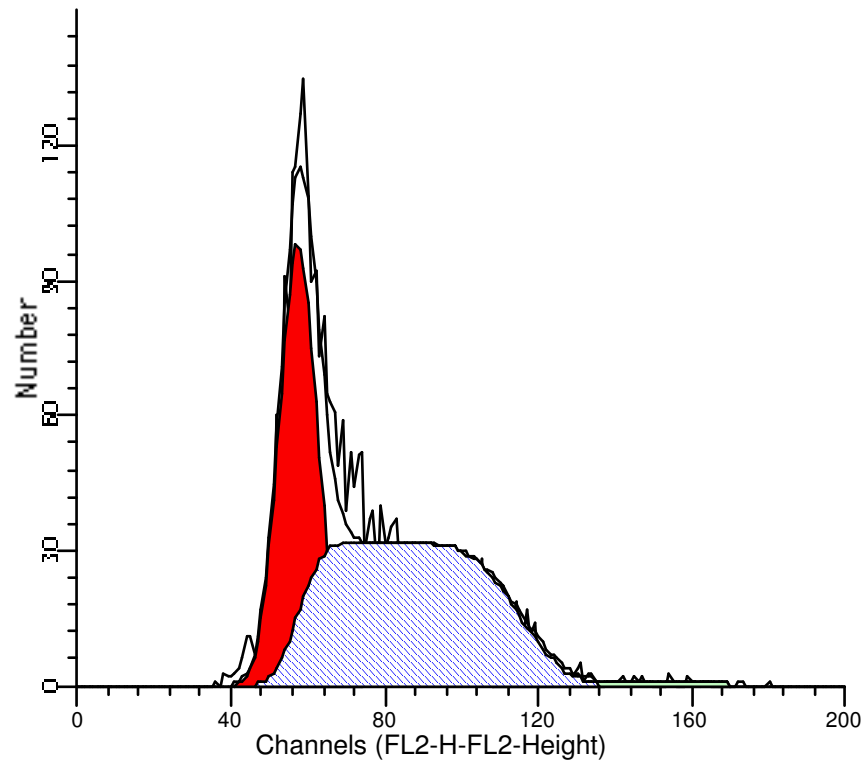


Figure 150: Histogram of HT-29 cells treated with 50μM curcumin for 48 hours.

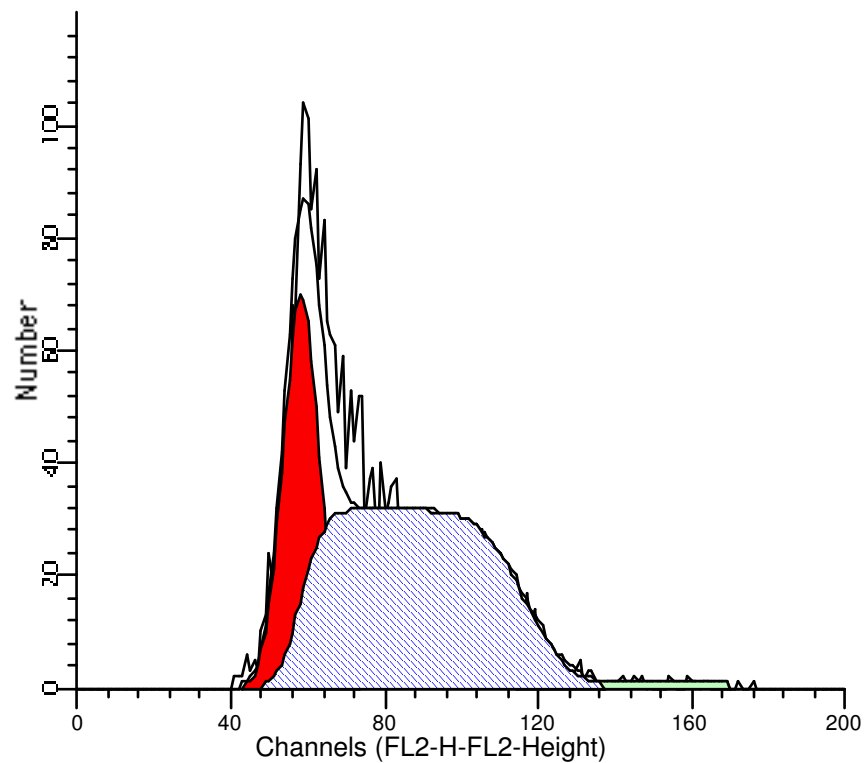


Figure 151: Histogram of HT-29 cells treated with 75μM curcumin for 48 hours.

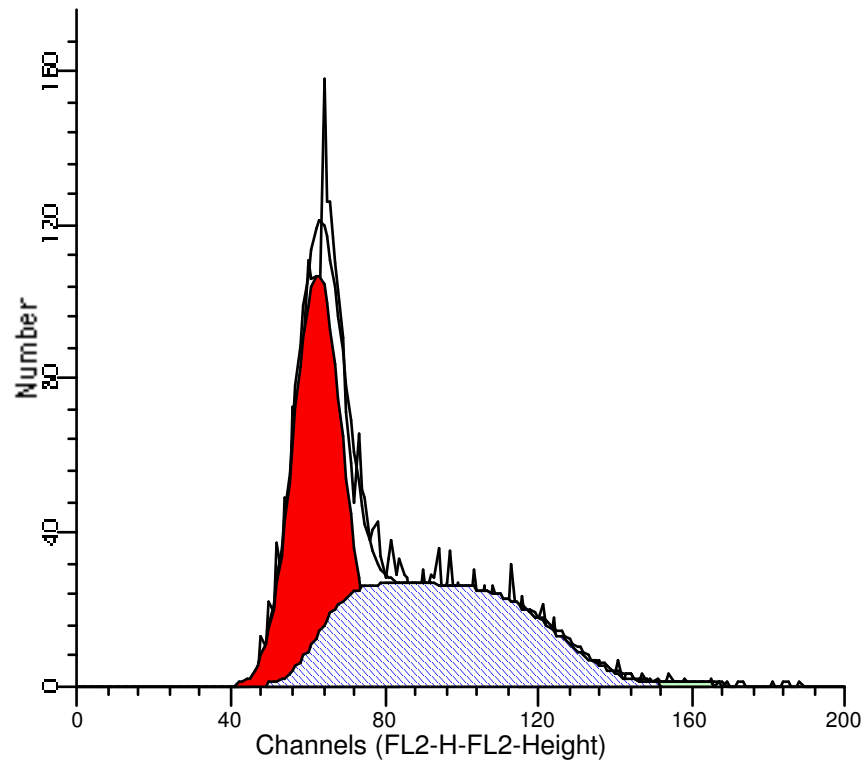


Figure 152: Histogram of HT-29 cells treated with 100μM curcumin for 48 hours.

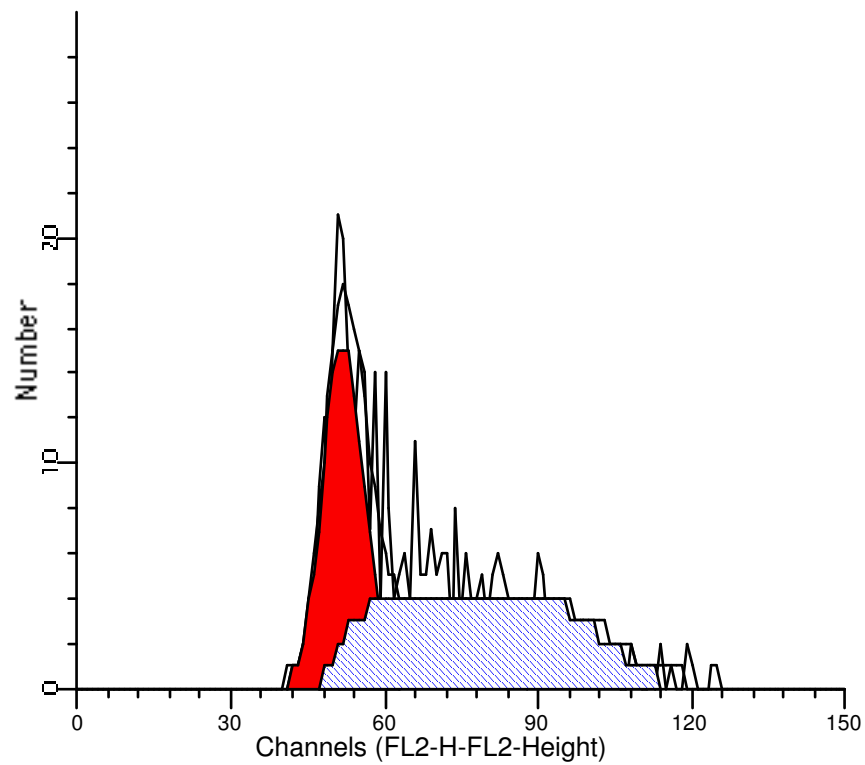


Figure 153: Histogram of HT-29 cells treated with 25μM curcumin for 72 hours.

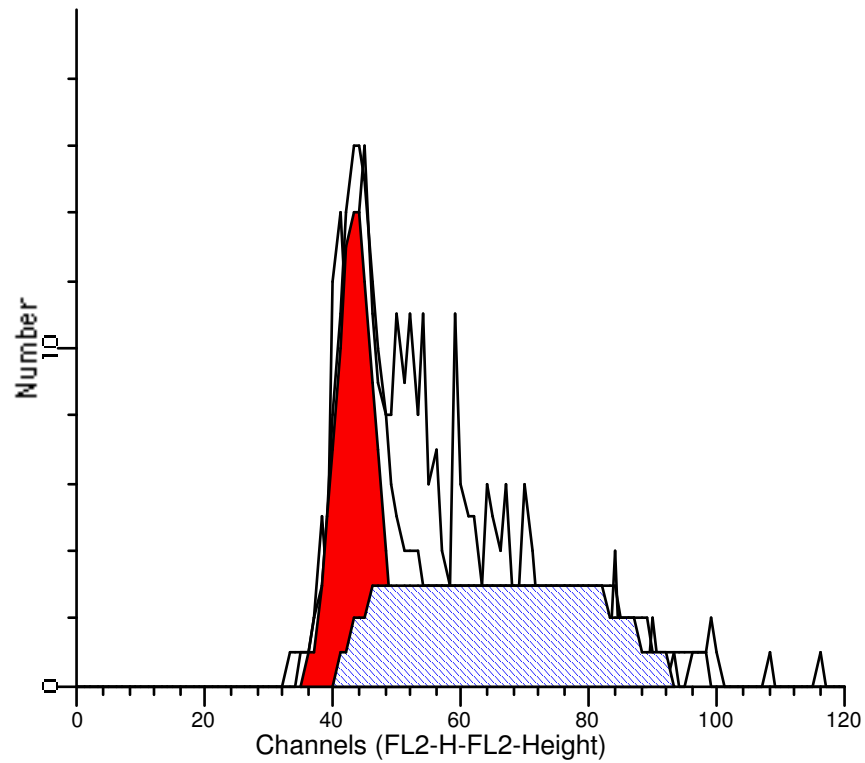


Figure 154: Histogram of HT-29 cells treated with 50μM curcumin for 72 hours.

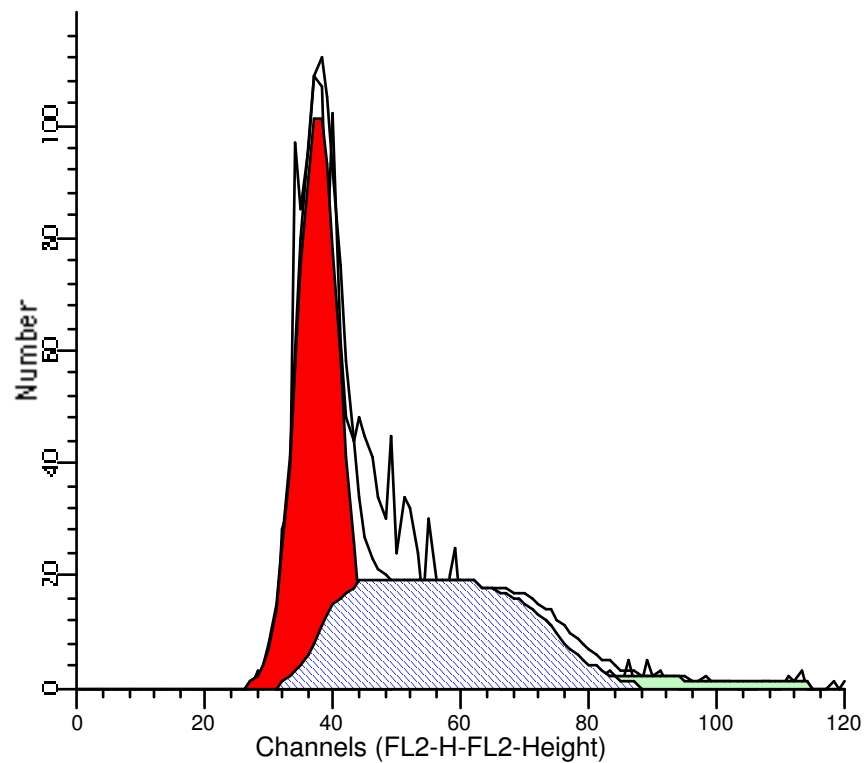


Figure 155: Histogram of HT-29 cells treated with 75μM curcumin for 72 hours.

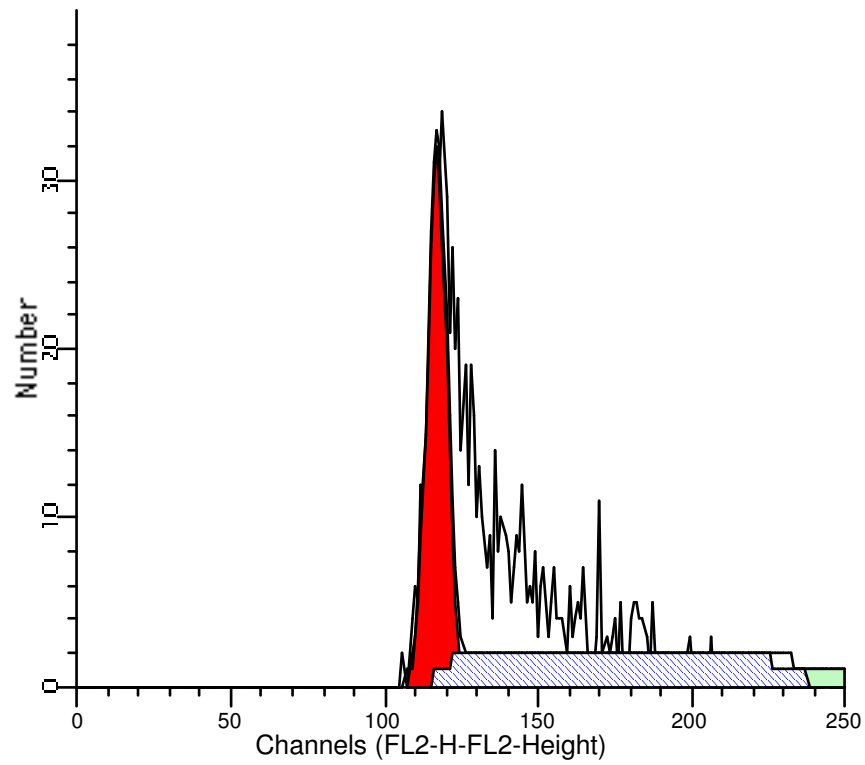


Figure 156: Histogram of HT-29 cells treated with 1μM SAHA for 12 hours.

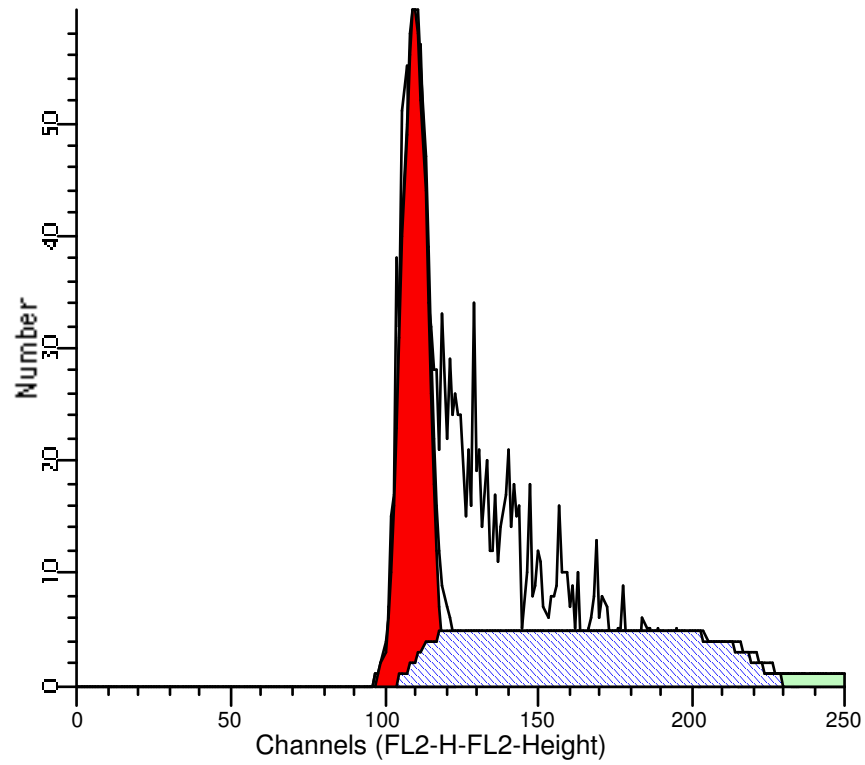


Figure 157: Histogram of HT-29 cells treated with 2.5 μ M SAHA for 12 hours.

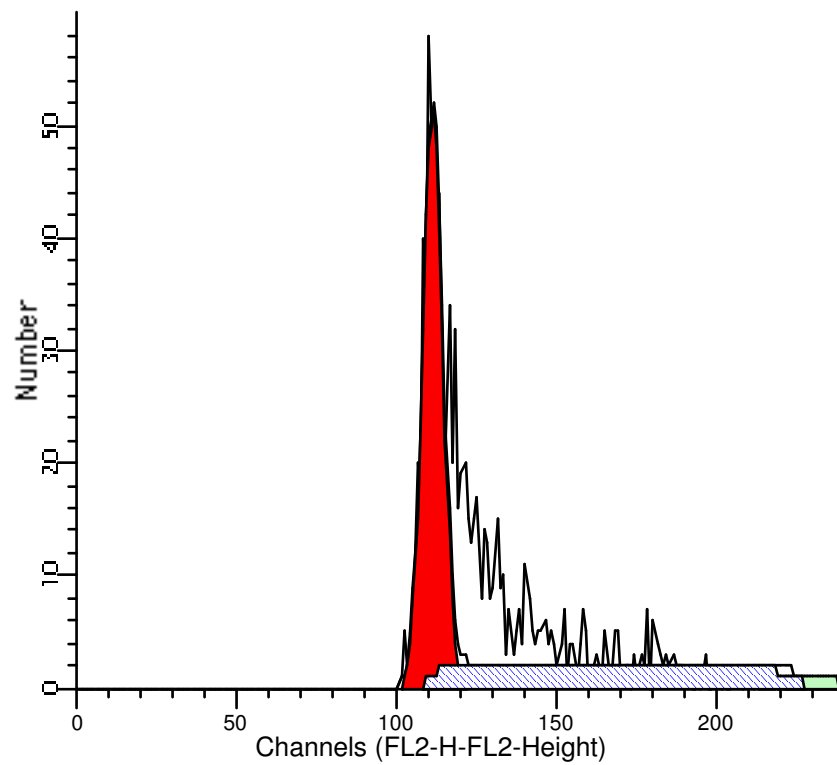


Figure 158: Histogram of HT-29 cells treated with 5 μ M SAHA for 12 hours.

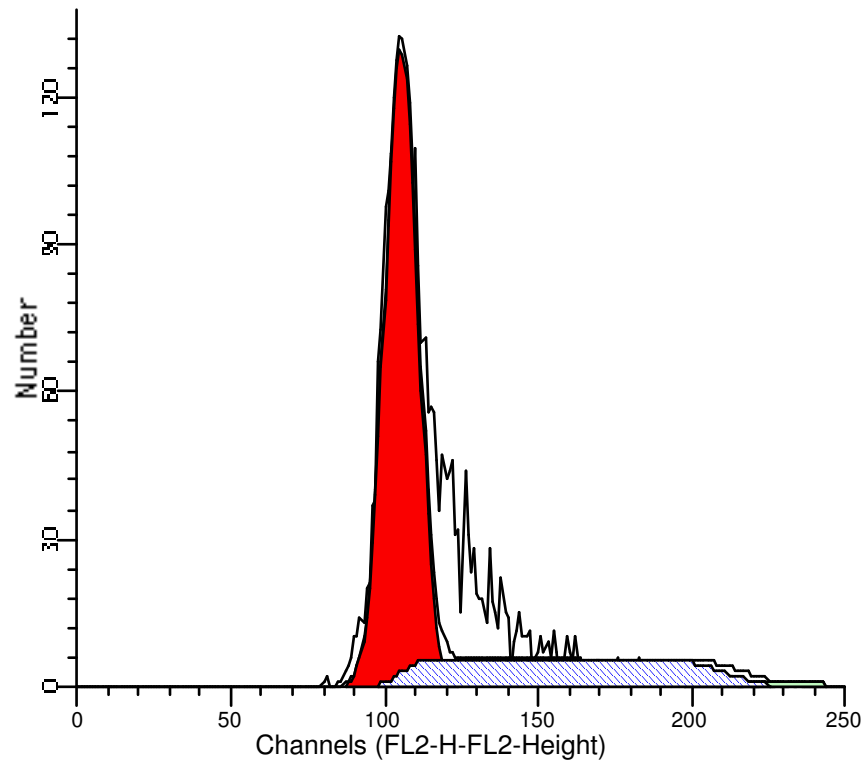


Figure 159: Histogram of HT-29 cells treated with 7.5μM SAHA for 12 hours.

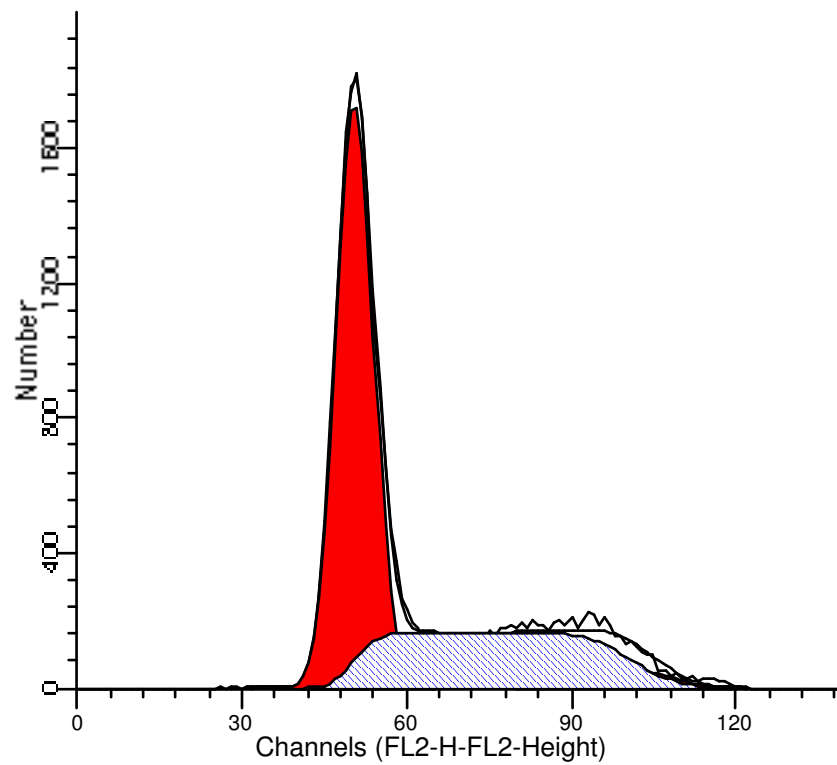


Figure 160: Histogram of HT-29/SAHA control cells treated with DMSO for 24 hours.

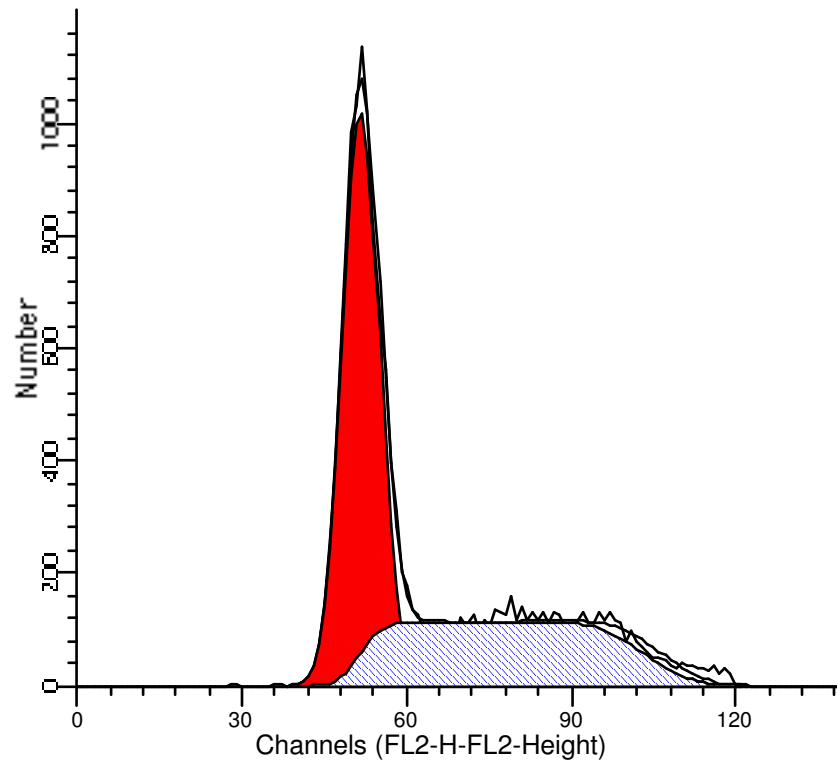


Figure 161: Histogram of HT-29 cells treated with 1 μ M SAHA for 24 hours.

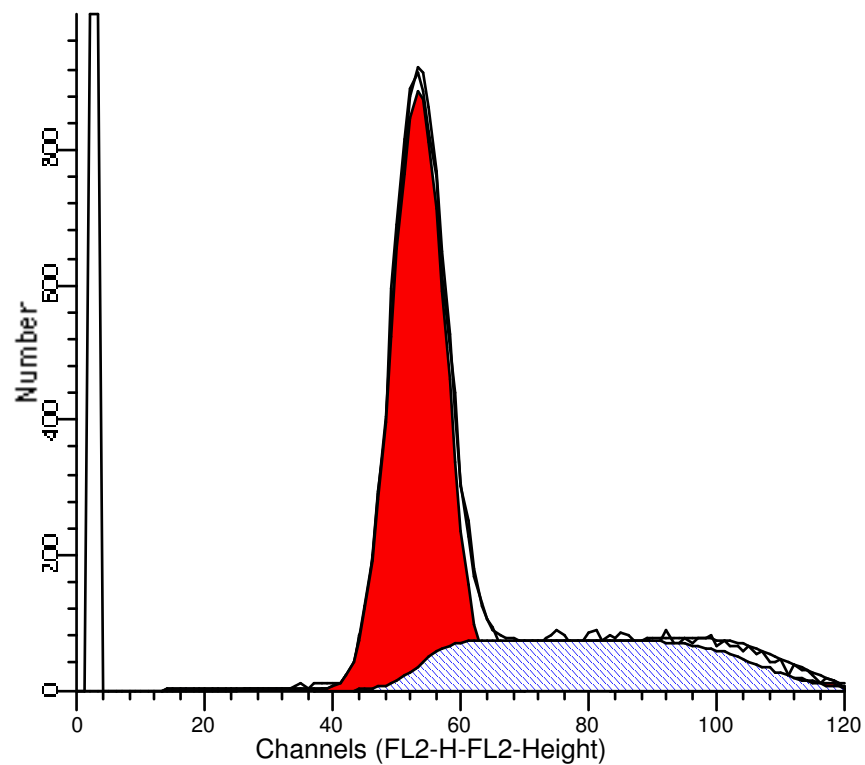


Figure 162: Histogram of HT-29 cells treated with 2.5 μ M SAHA for 24 hours.

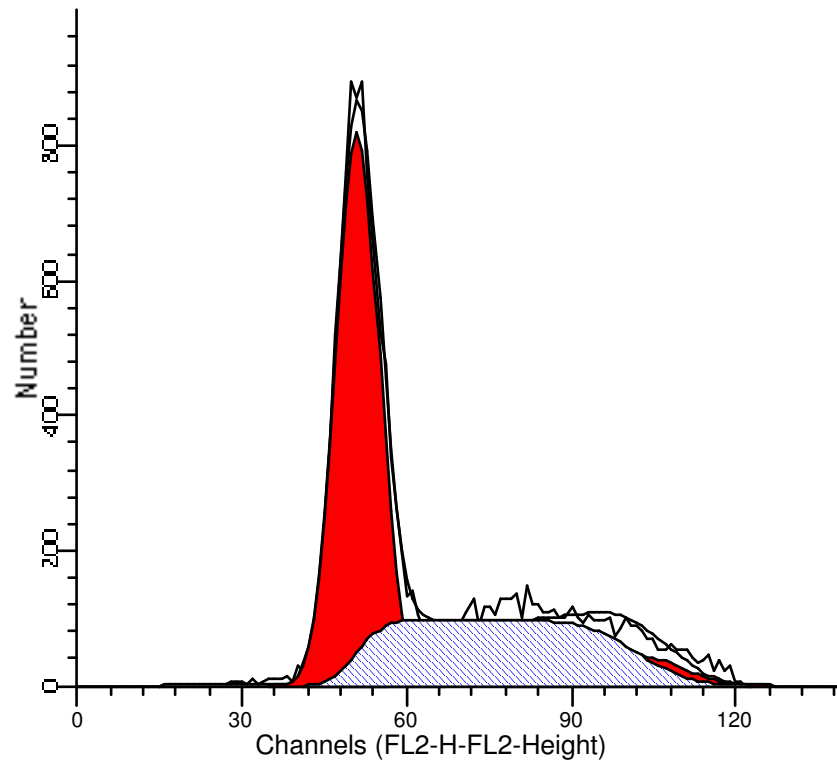


Figure 163: Histogram of HT-29 cells treated with 5 μ M SAHA for 24 hours.

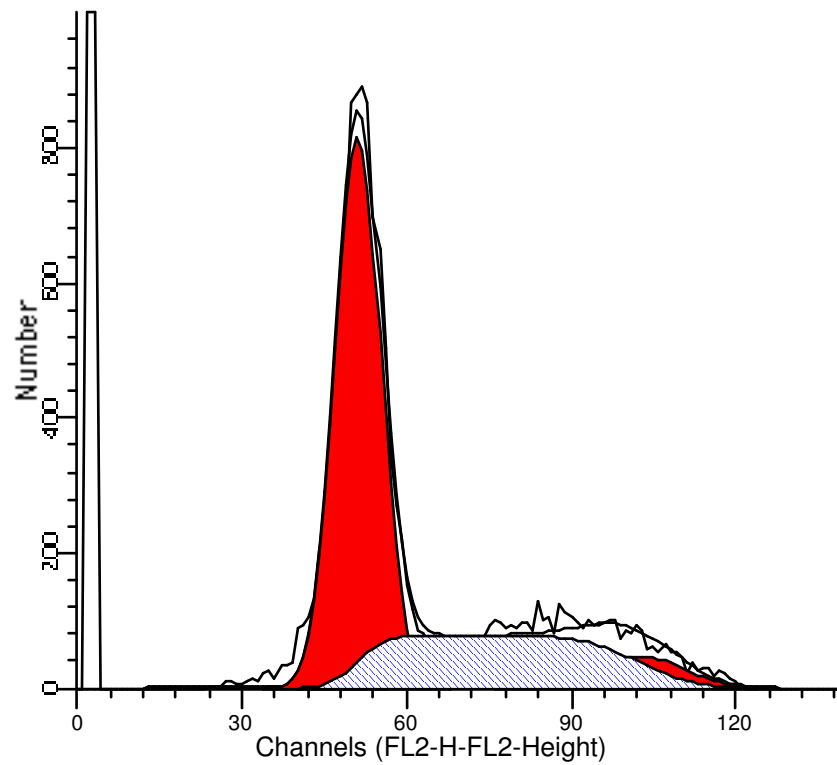


Figure 164: Histogram of HT-29 cells treated with 7.5 μ M SAHA for 24 hours.

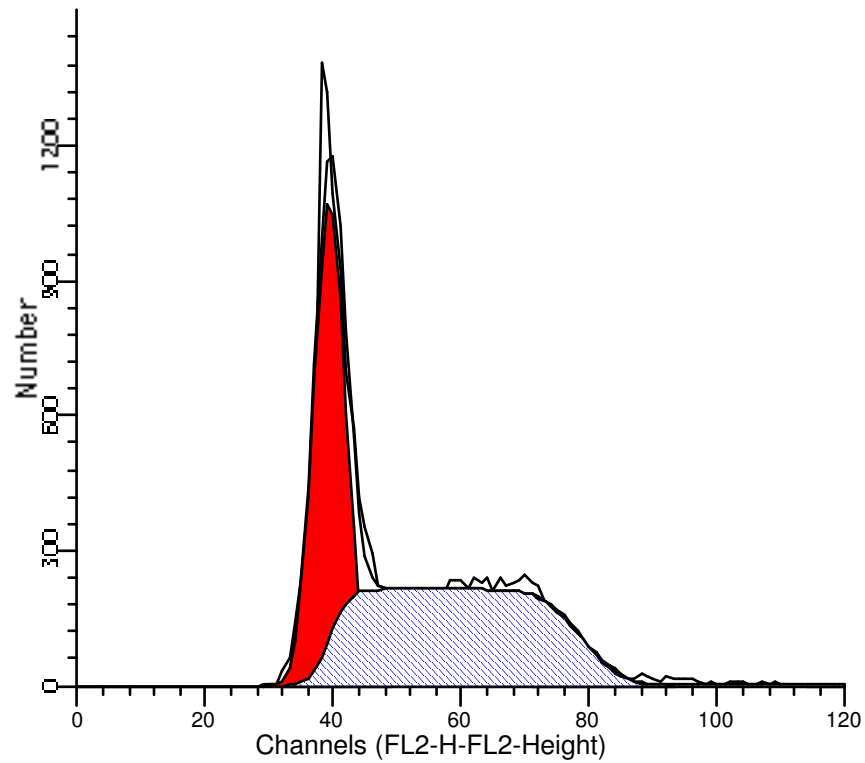


Figure 165: Histogram of HT-29/SAHA control cells treated with DMSO for 48 hours.

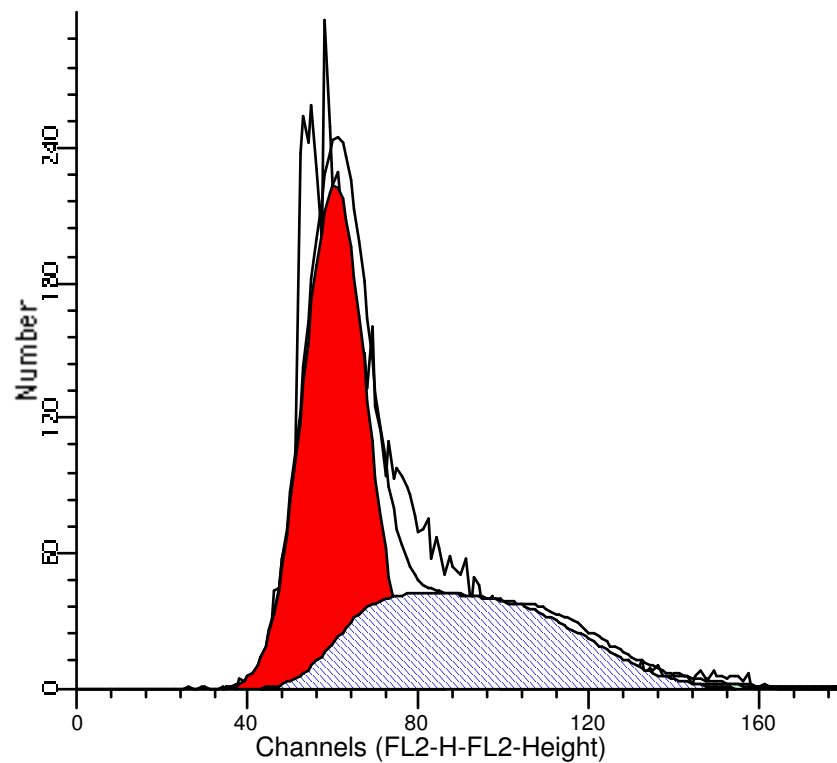


Figure 166: Histogram of HT-29 cells treated with 1 μ M SAHA for 48 hours.

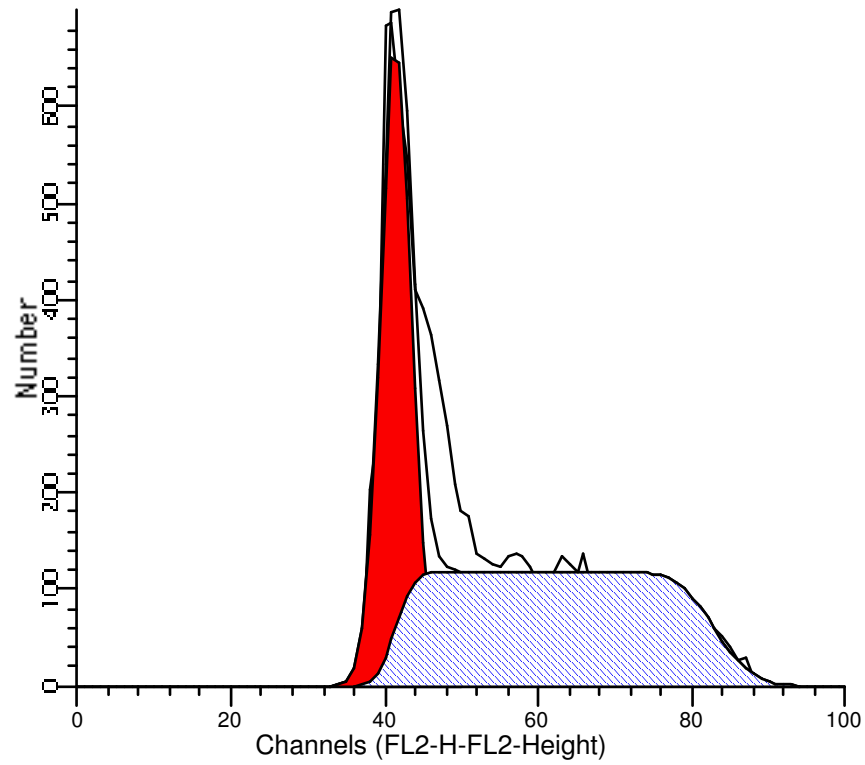


Figure 167: Histogram of HT-29 cells treated with 2.5μM SAHA for 48 hours.

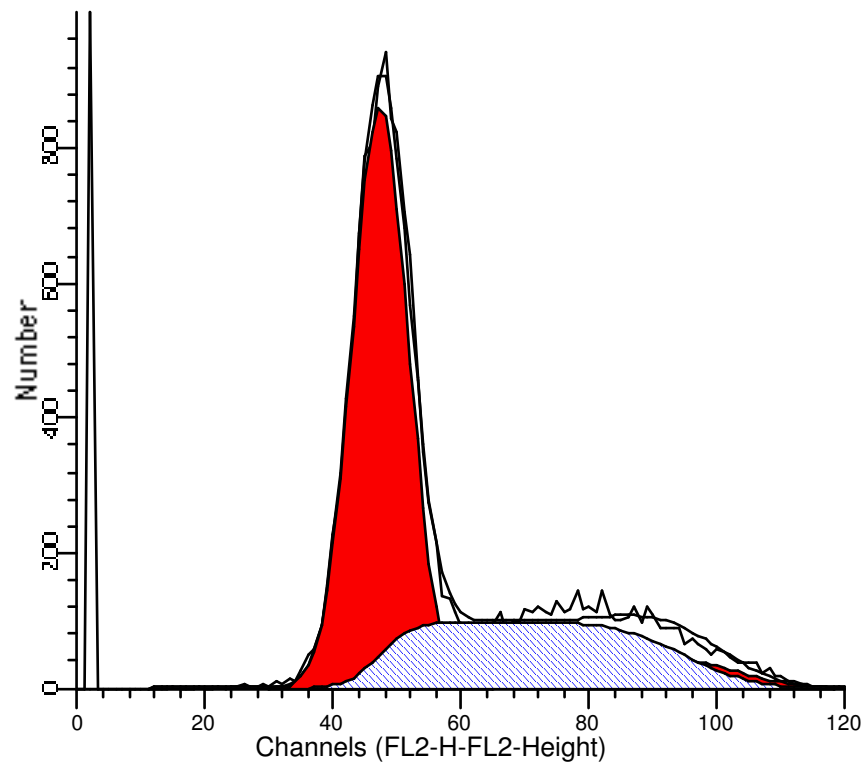


Figure 168: Histogram of HT-29 cells treated with 2.5μM SAHA for 72 hours.

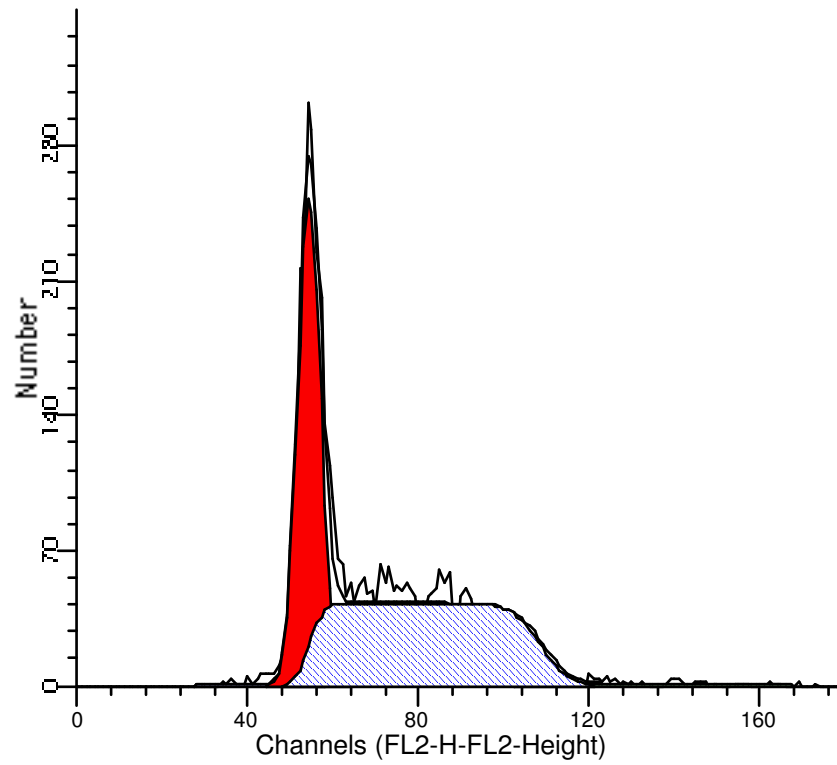


Figure 169: Histogram of HT-29 cells treated with 5 μ M SAHA for 72 hours.

MCF-7/Lycopene

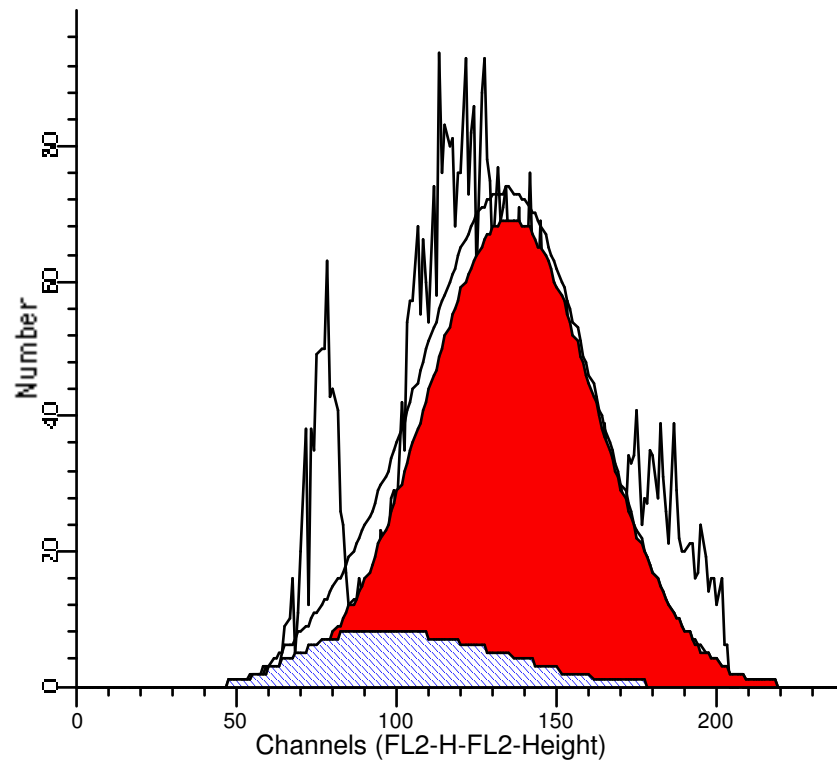


Figure 170: Histogram of MCF-7/lycopene control cells treated with THF for 12 hours.

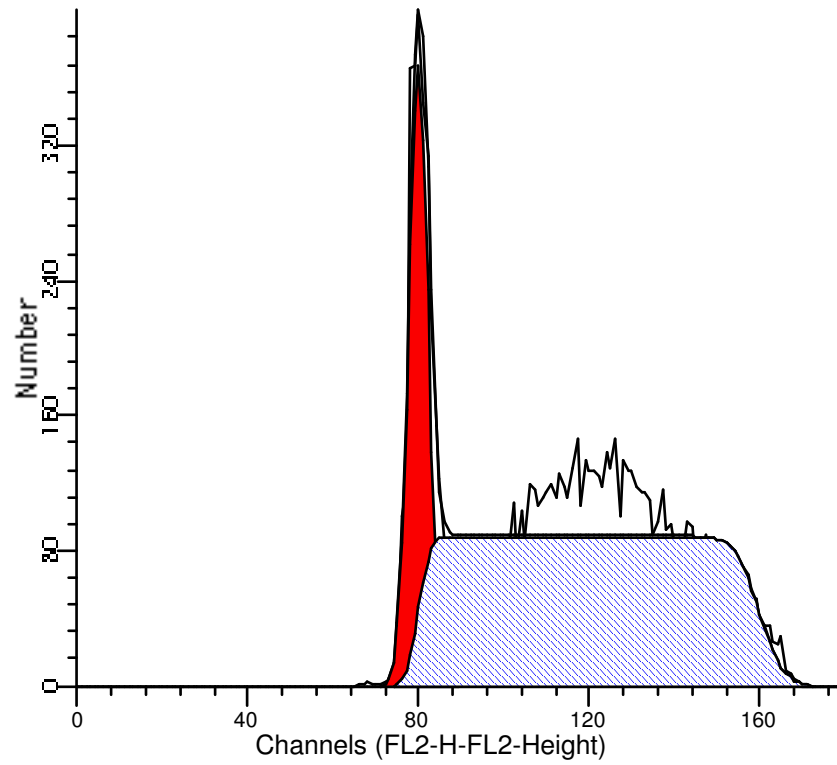


Figure 171: Histogram of MCF-7 cells treated with 2 μ M lycopene for 12 hours.

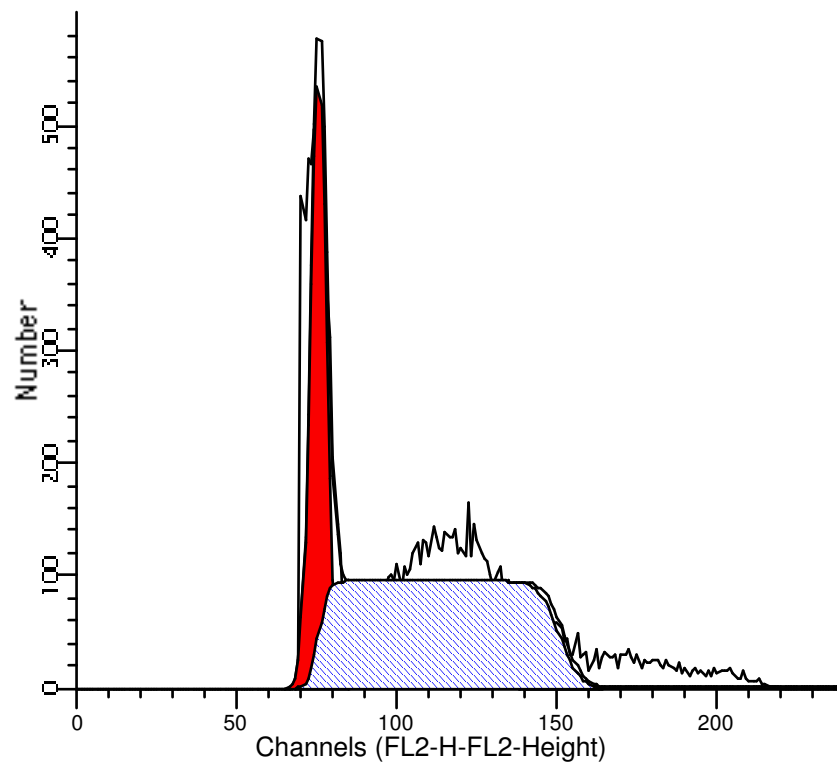


Figure 172: Histogram of MCF-7 cells treated with 5 μ M lycopene for 12 hours.

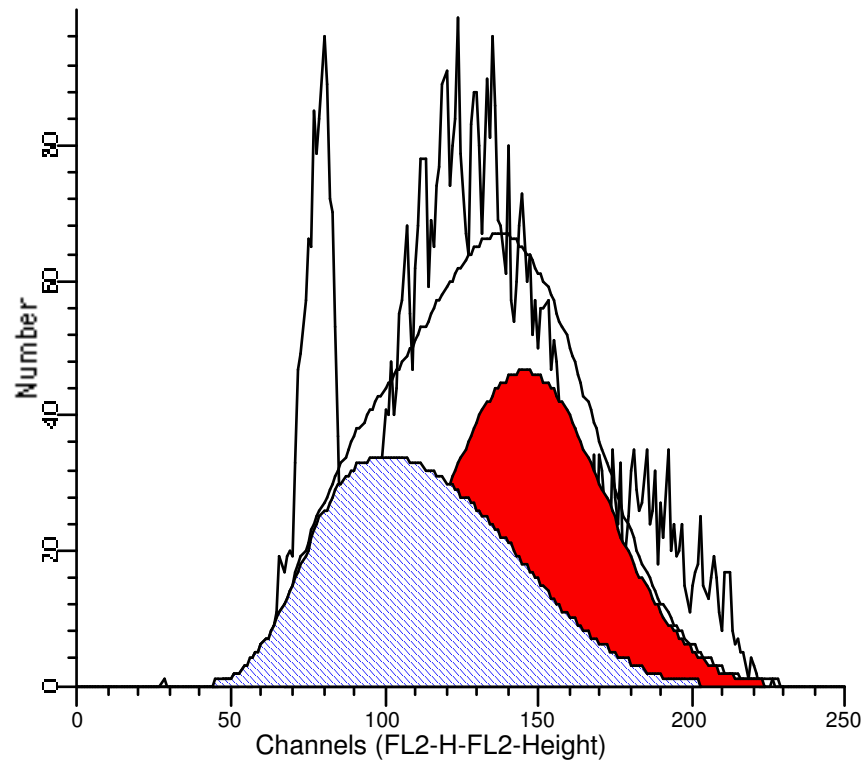


Figure 173: Histogram of MCF-7 cells treated with 10μM lycopene for 12 hours.

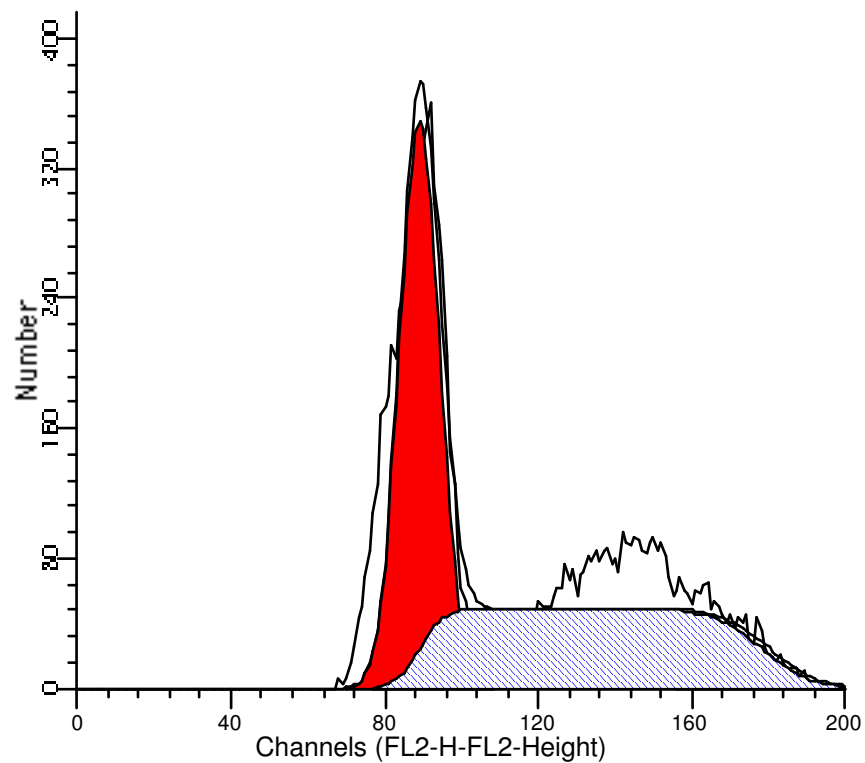


Figure 174: Histogram of MCF-7/lycopene control cells treated with THF for 24 hours.

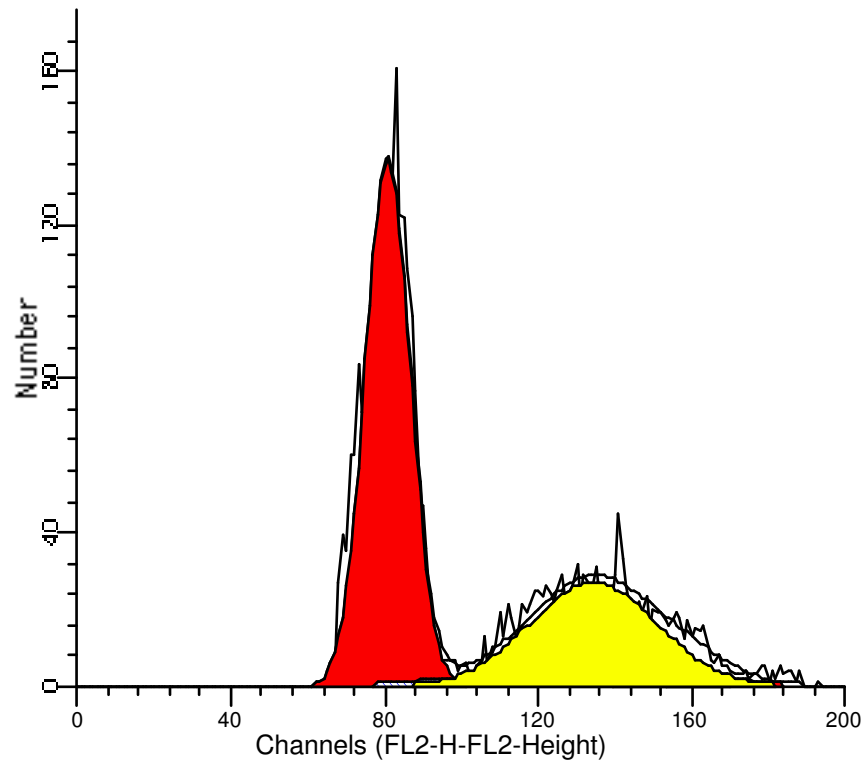


Figure 175: Histogram of MCF-7 cells treated with 2 μ M lycopene for 24 hours.

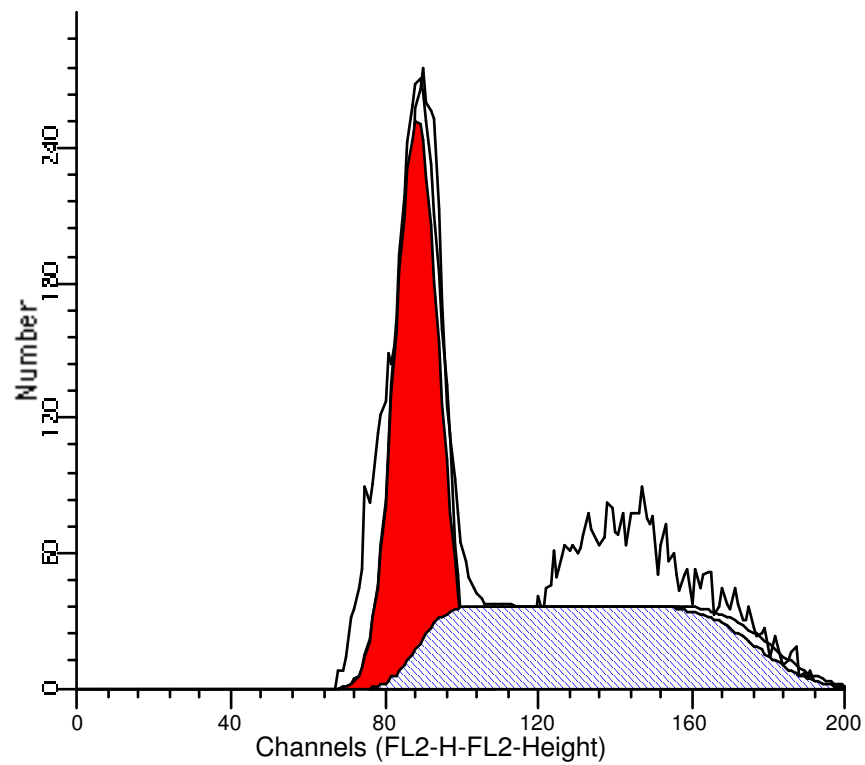


Figure 176: Histogram of MCF-7 cells treated with 5 μ M lycopene for 24 hours.

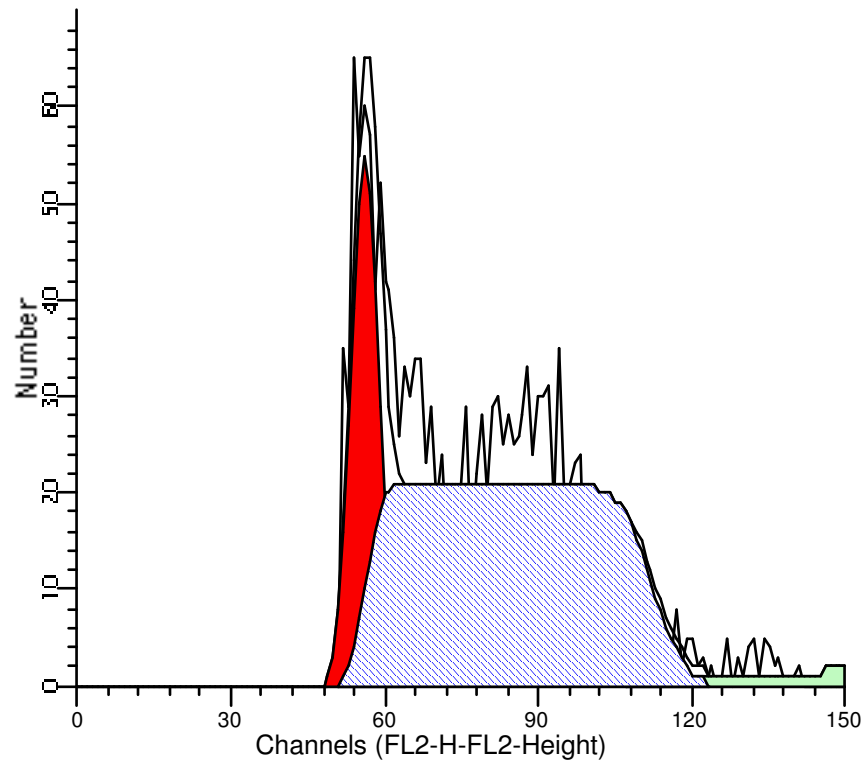


Figure 177: Histogram of MCF-7 cells treated with 20 μ M lycopene for 24 hours.

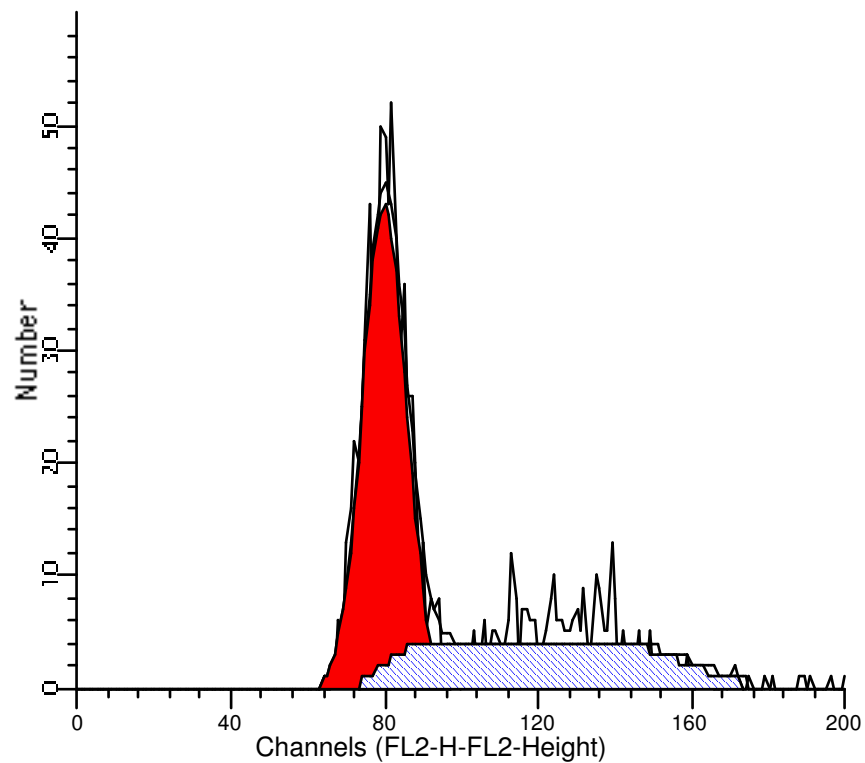


Figure 178: Histogram of MCF-7/lycopene control cells treated with THF for 48 hours.

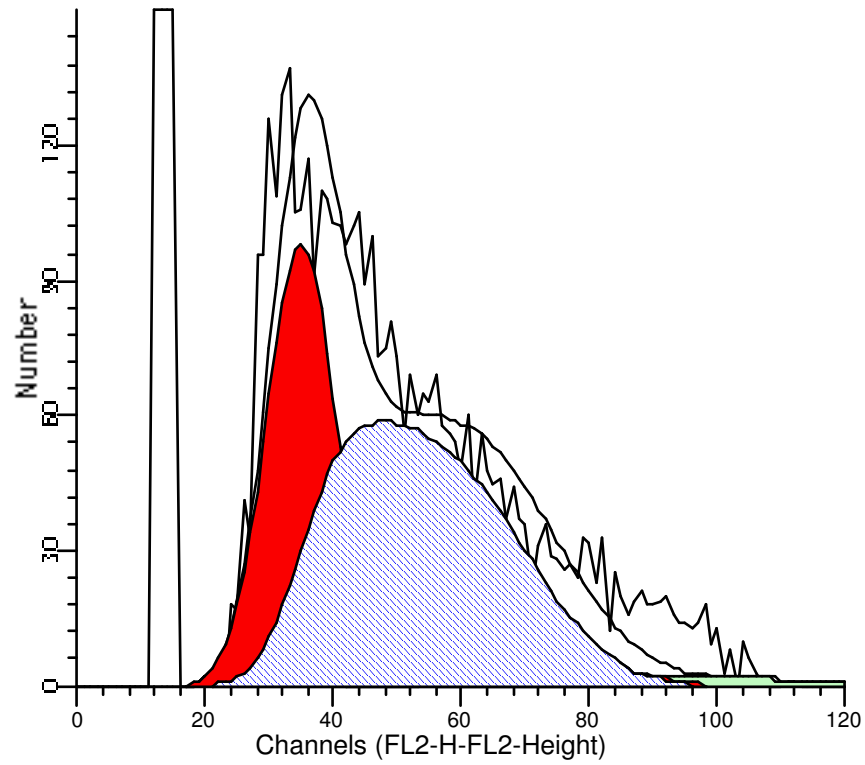


Figure 179: Histogram of MCF-7 cells treated with 5 μ M lycopene for 48 hours.

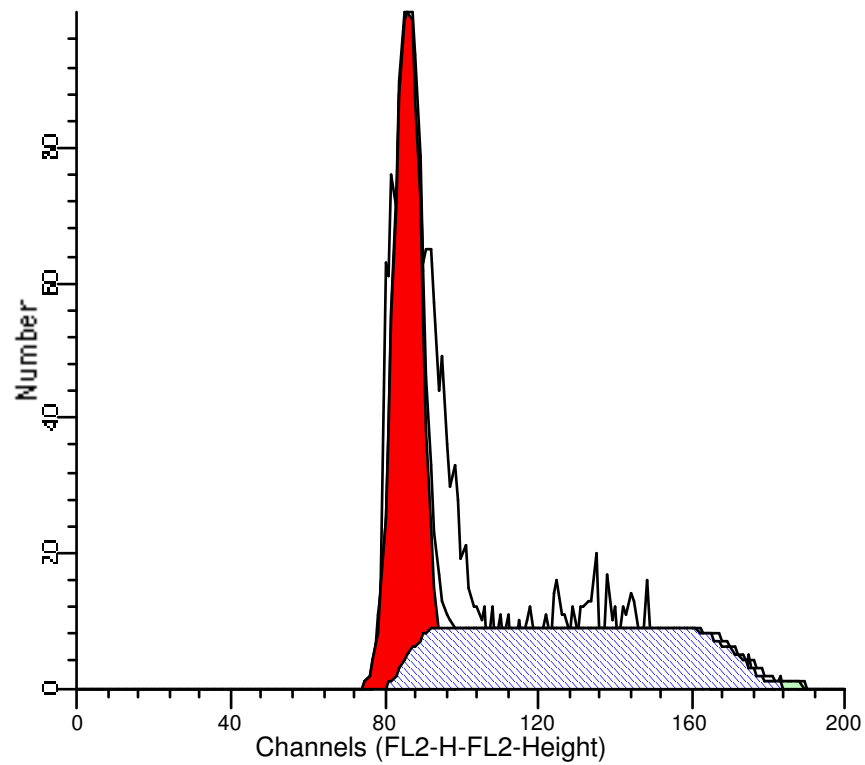


Figure 180: Histogram of MCF-7 cells treated with 10 μ M lycopene for 48 hours.

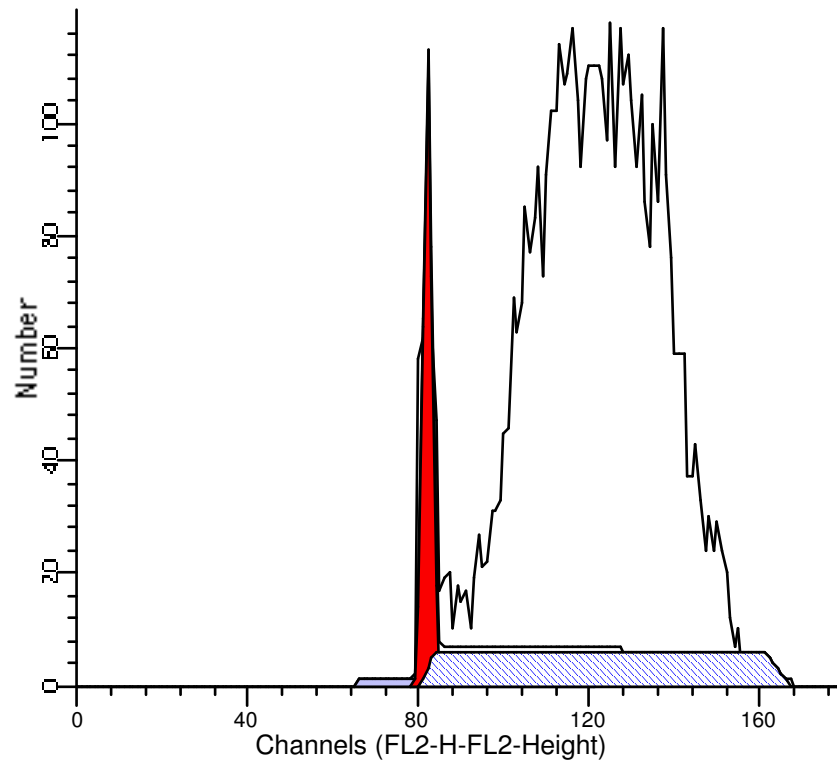


Figure 181: Histogram of MCF-7 cells treated with 5μM lycopene for 72 hours.

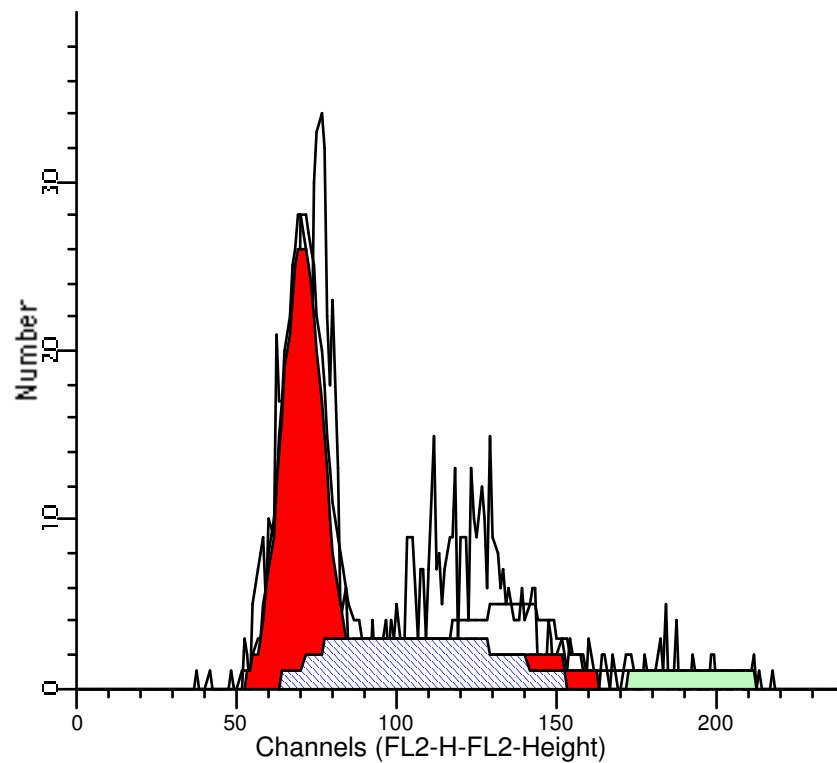


Figure 182: Histogram of MCF-7 cells treated with 10μM lycopene for 72 hours.

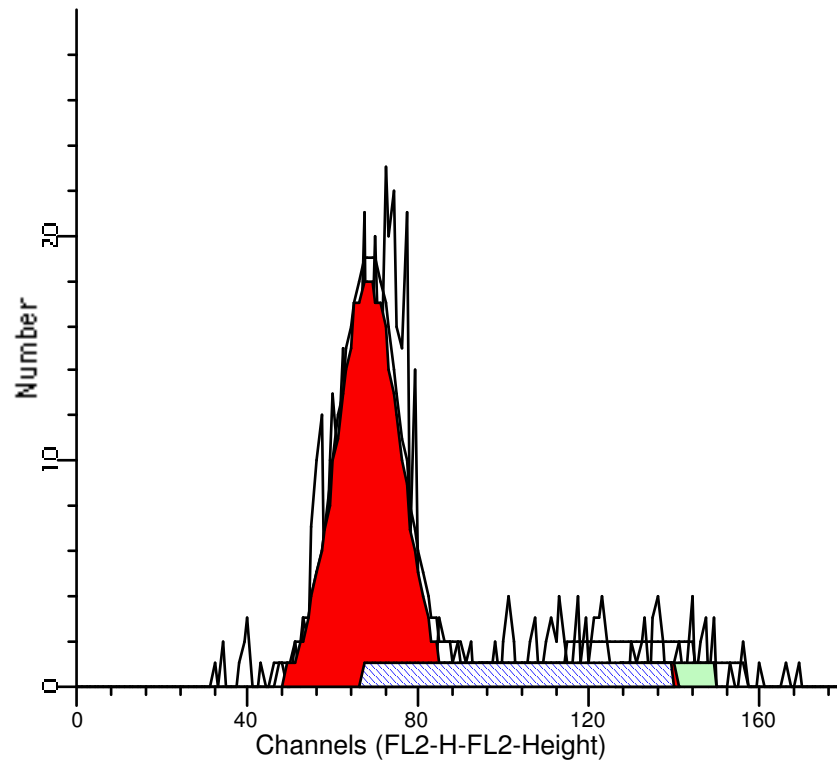


Figure 183: Histogram of MCF-7 cells treated with 20 μ M lycopene for 72 hours.

MCF-7/Thalidomide

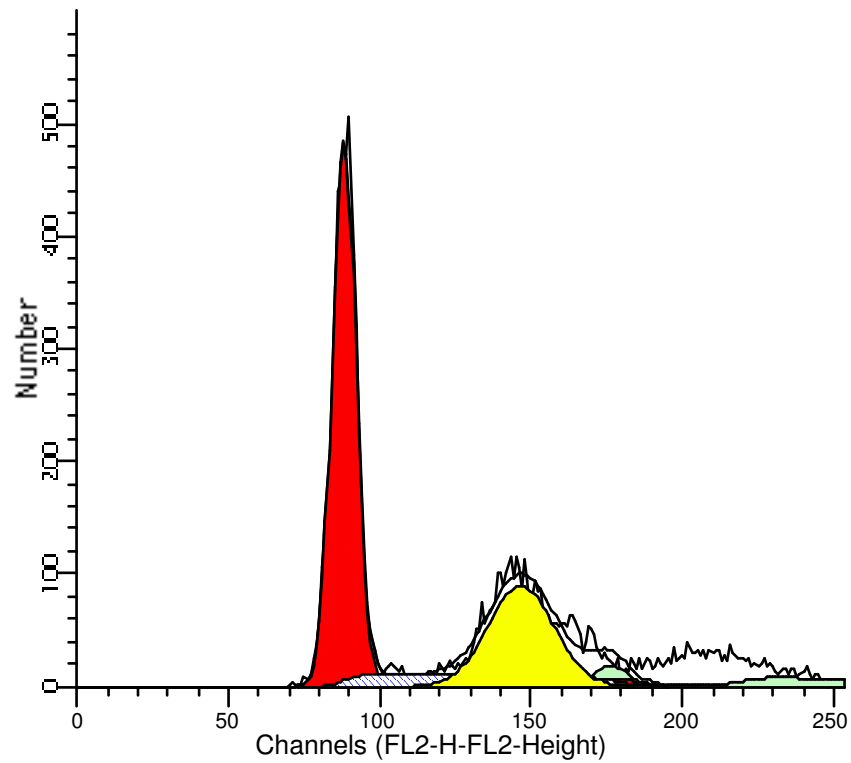


Figure 184: Histogram of MCF-7/thalidomide control cells treated with DMSO for 12 hours.

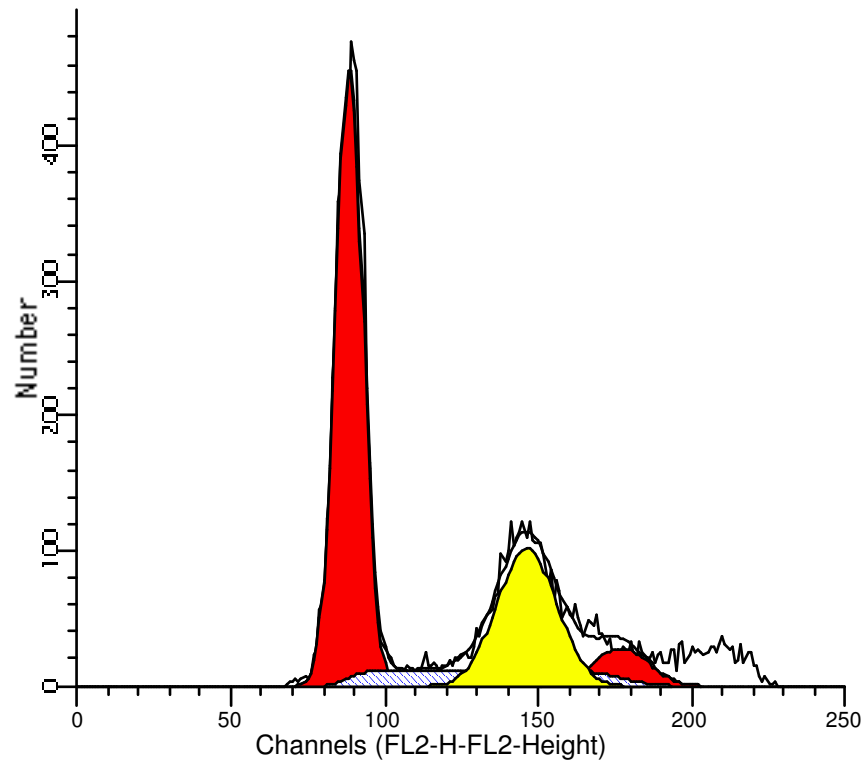


Figure 185: Histogram of MCF-7 cells treated with 10µM thalidomide for 12 hours.

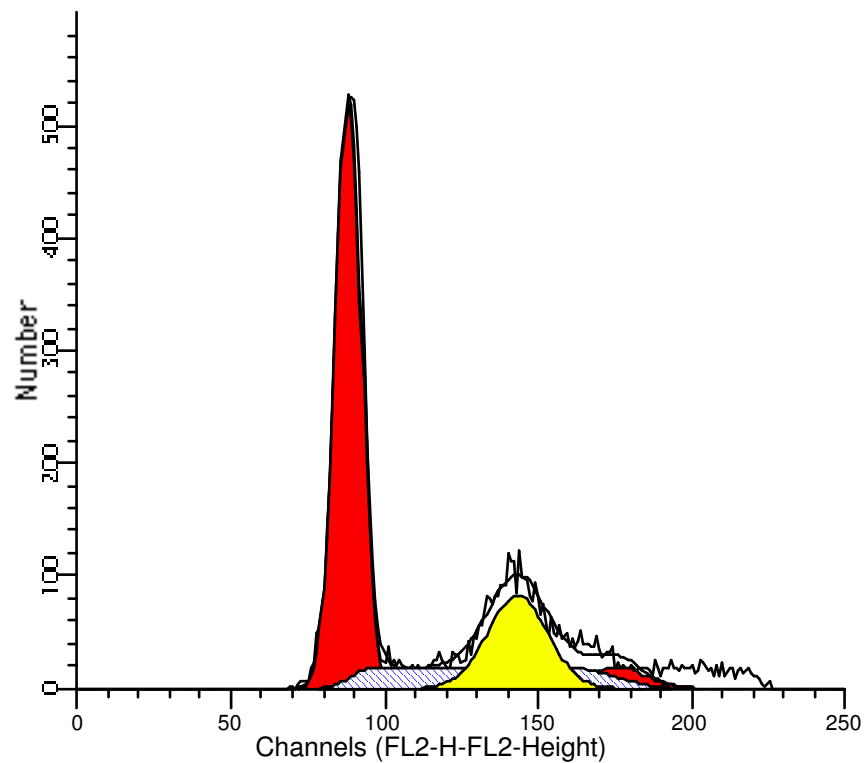


Figure 186: Histogram of MCF-7 cells treated with 30µM thalidomide for 12 hours.

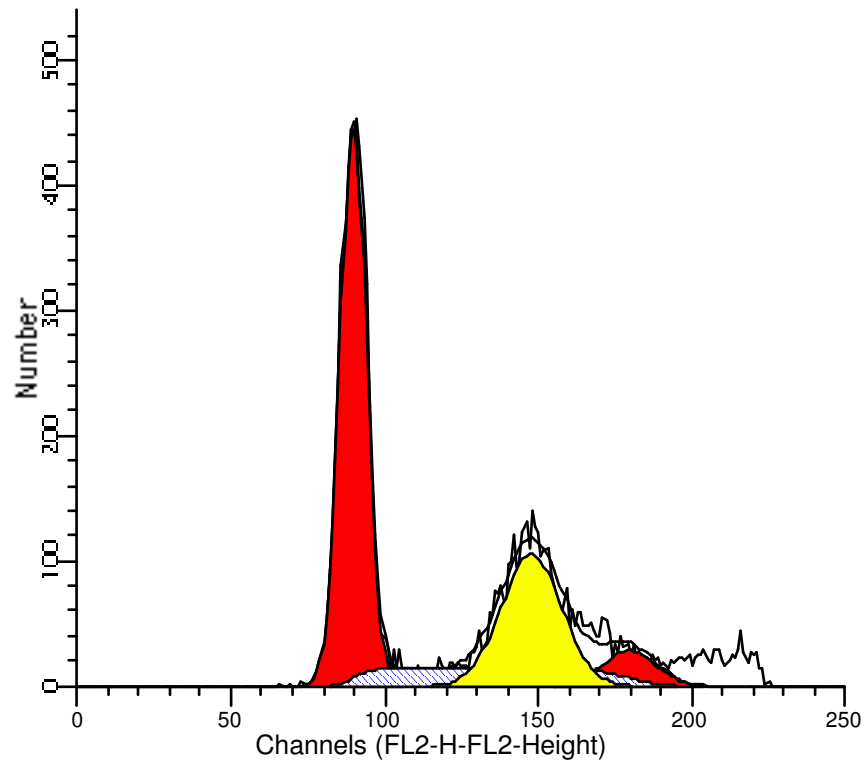


Figure 187: Histogram of MCF-7 cells treated with 100µM thalidomide for 12 hours.

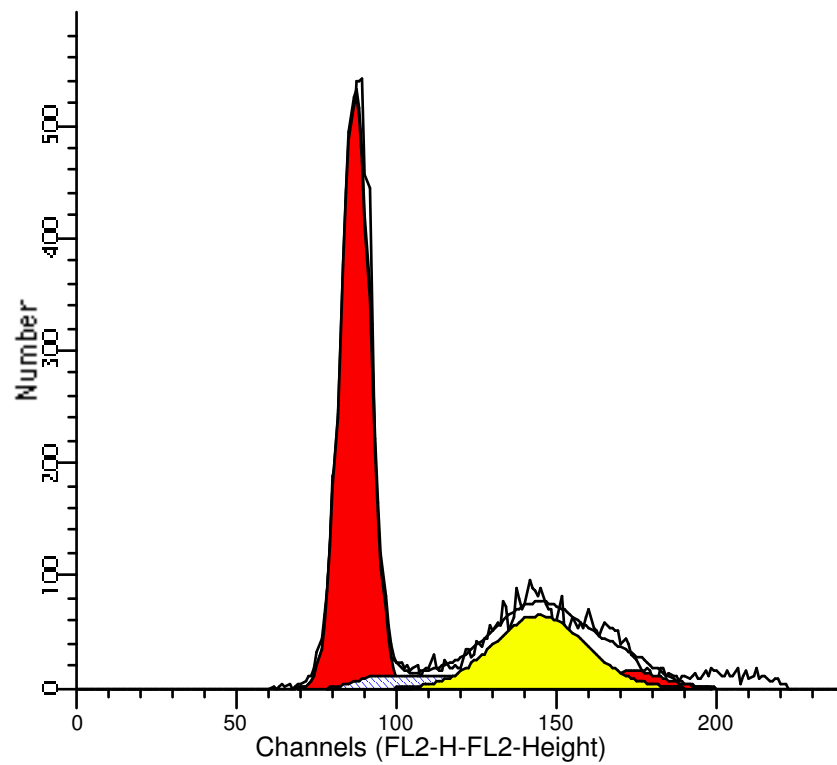


Figure 188: Histogram of MCF-7 cells treated with 300µM thalidomide for 12 hours.

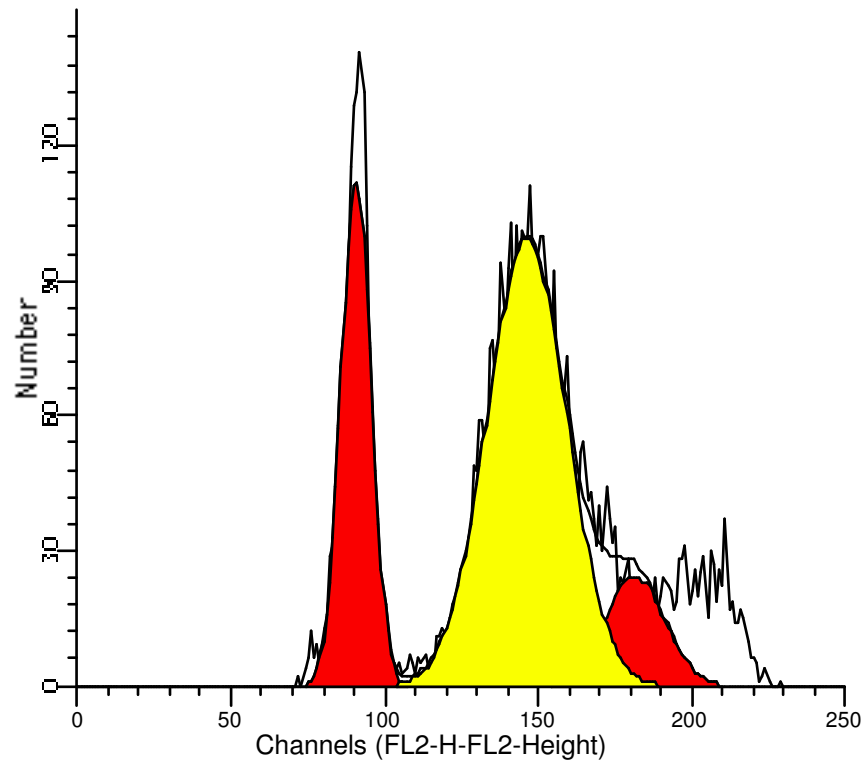


Figure 189: Histogram of MCF-7/thalidomide control cells treated with DMSO for 24 hours.

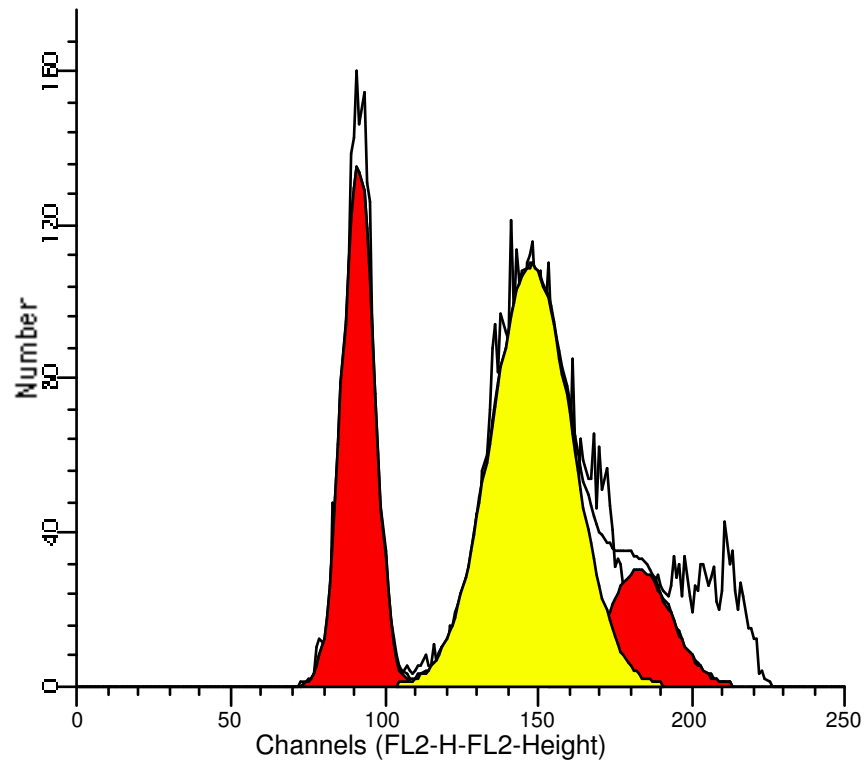


Figure 190: Histogram of MCF-7 cells treated with 10µM thalidomide for 24 hours.

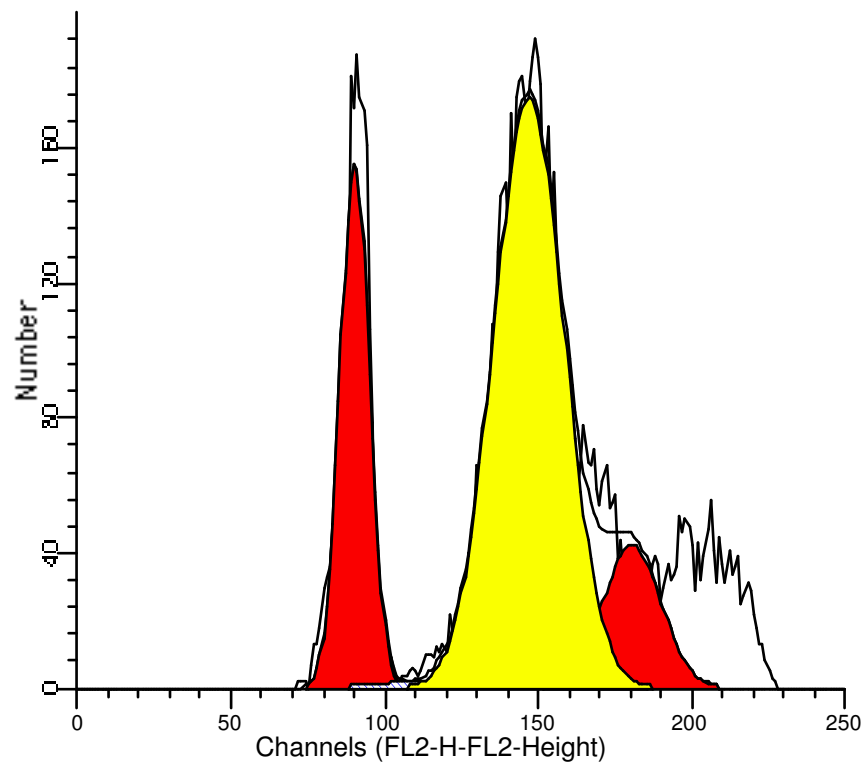


Figure 191: Histogram of MCF-7 cells treated with 30µM thalidomide for 24 hours.

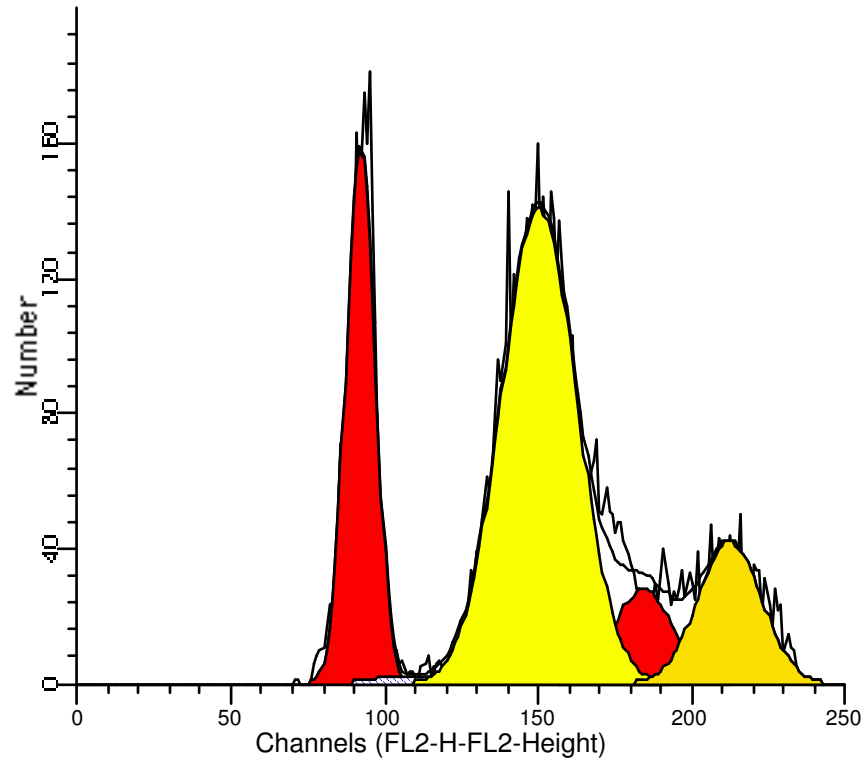


Figure 192: Histogram of MCF-7 cells treated with 100µM thalidomide for 24 hours.

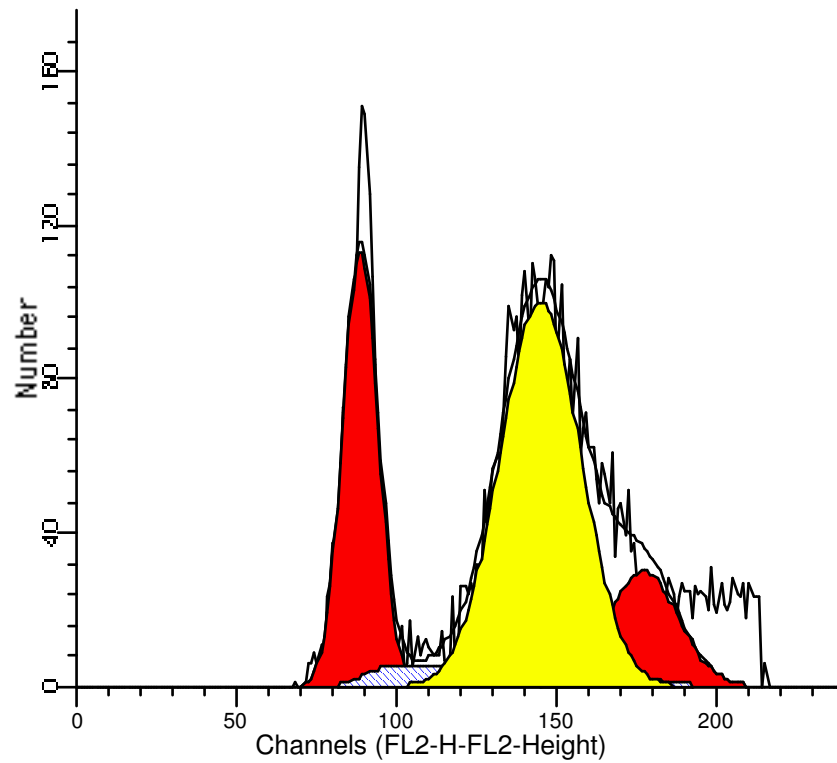


Figure 193: Histogram of MCF-7 cells treated with 300µM thalidomide for 24 hours.

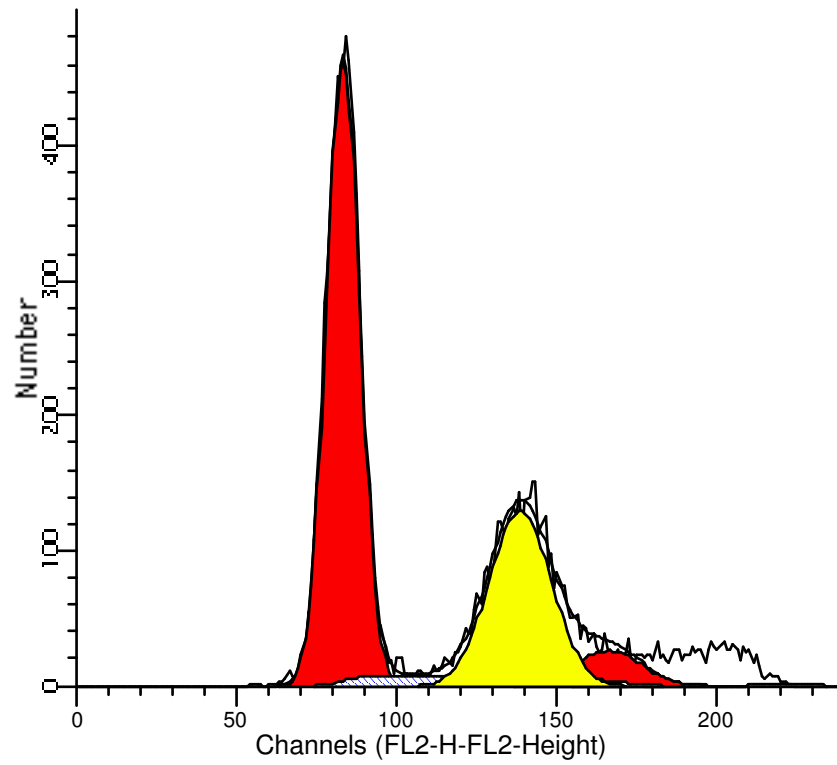


Figure 194: Histogram of MCF-7/thalidomide control cells treated with DMSO for 48 hours.

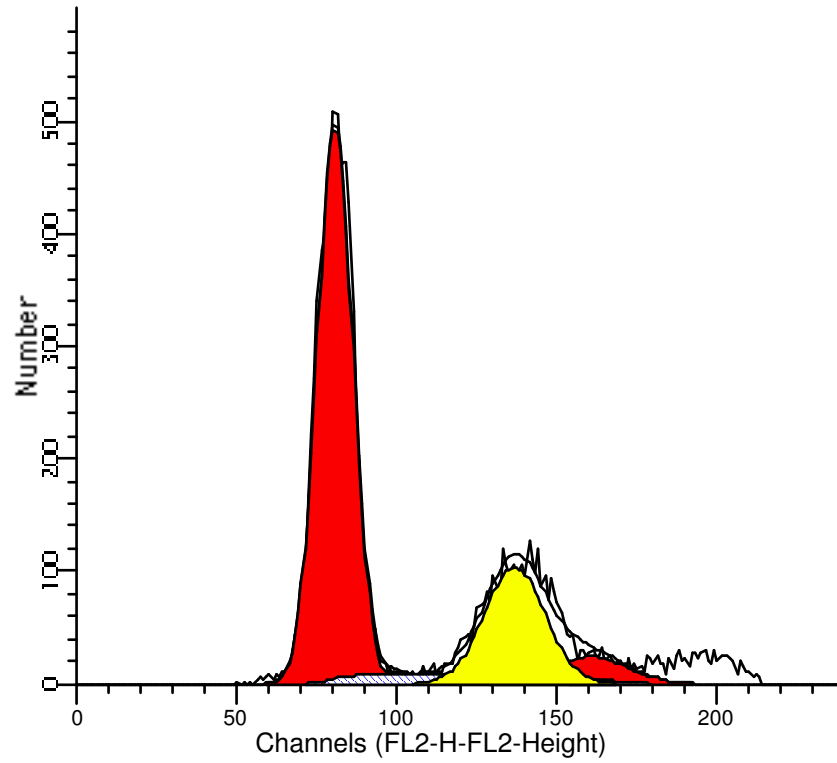


Figure 195: Histogram of MCF-7 cells treated with 10µM thalidomide for 48 hours.

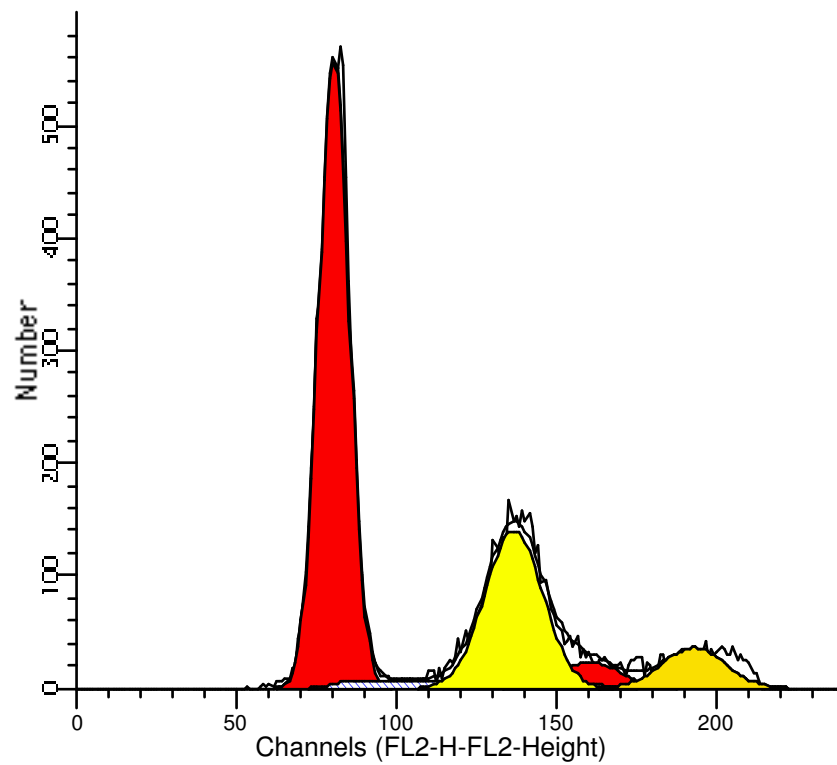


Figure 196: Histogram of MCF-7 cells treated with 30µM thalidomide for 48 hours.

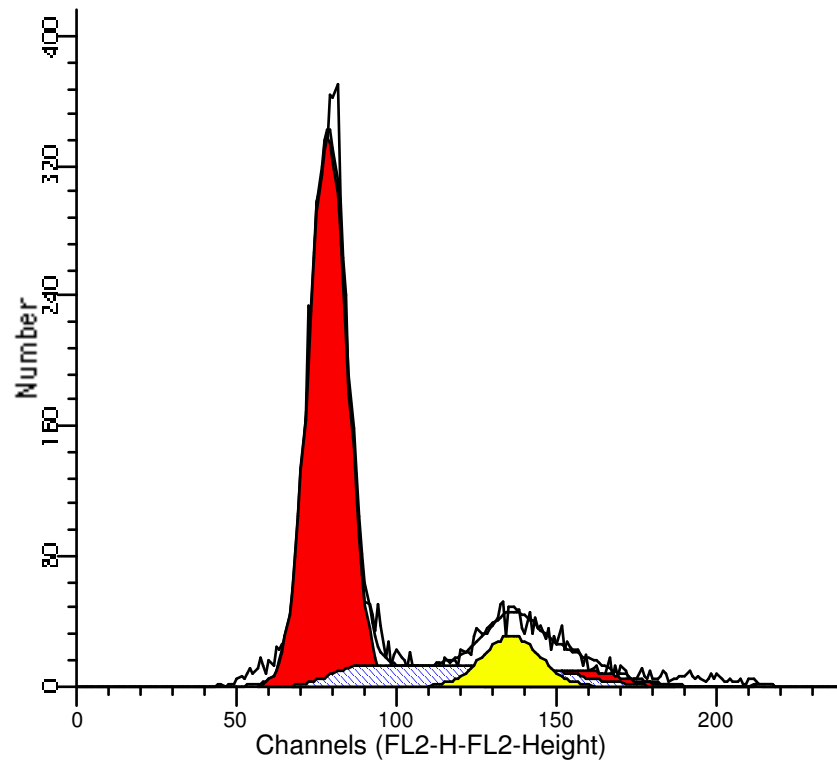


Figure 197: Histogram of MCF-7 cells treated with 300µM thalidomide for 48 hours.

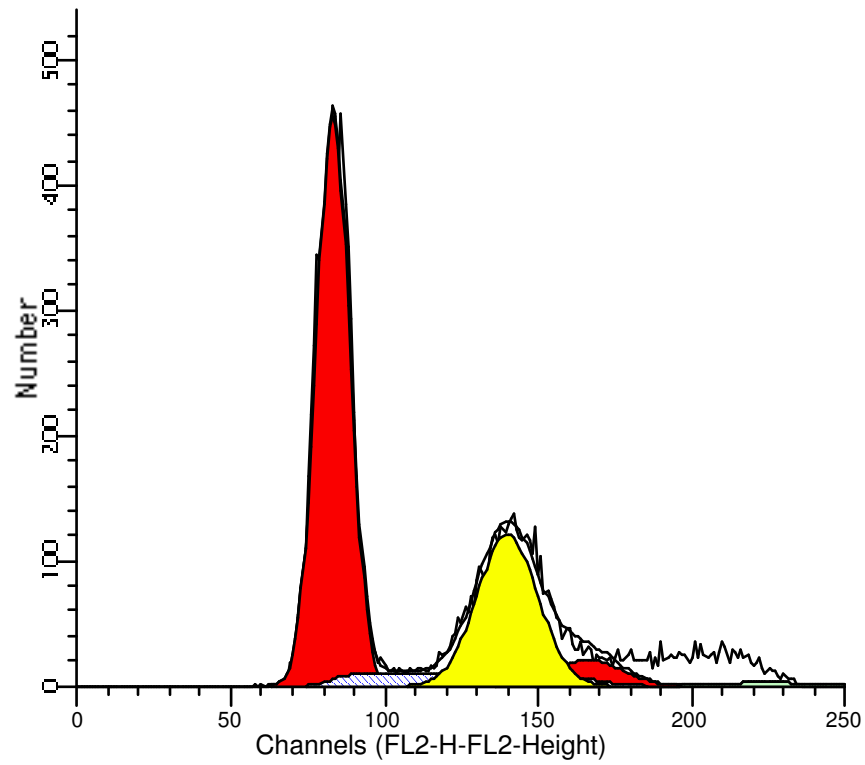


Figure 198: Histogram of MCF-7/thalidomide control cells treated with DMSO for 72 hours.

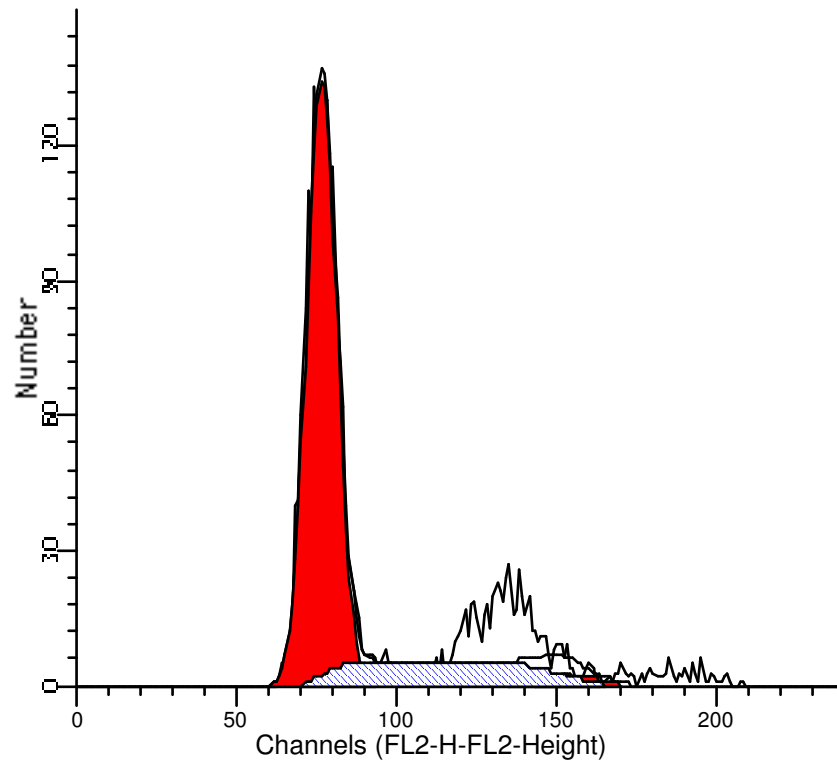


Figure 199: Histogram of MCF-7 cells treated with 10µM thalidomide for 72 hours.

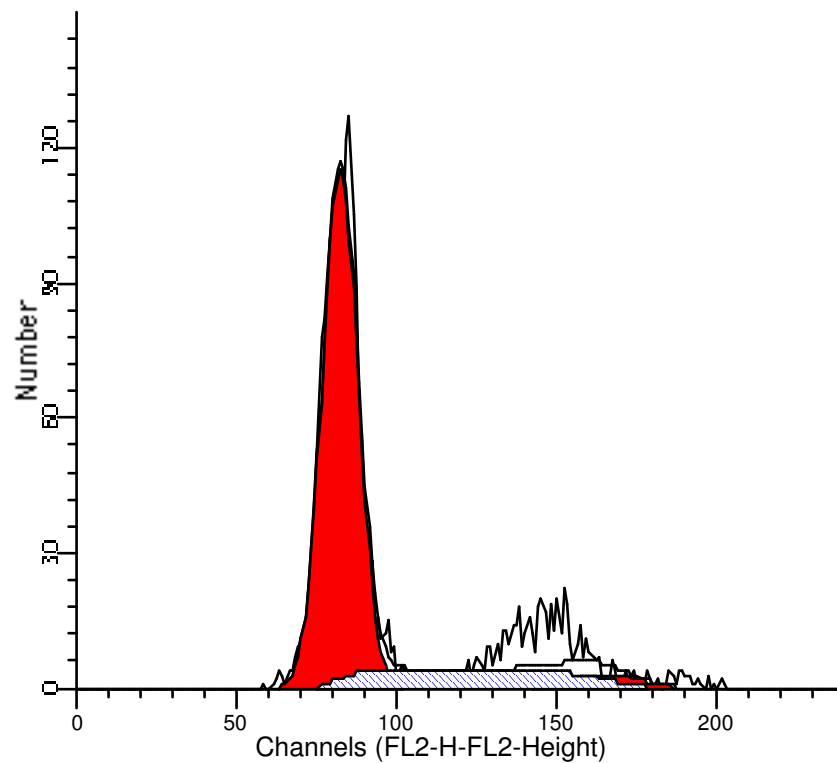


Figure 200: Histogram of MCF-7 cells treated with 30µM thalidomide for 72 hours.

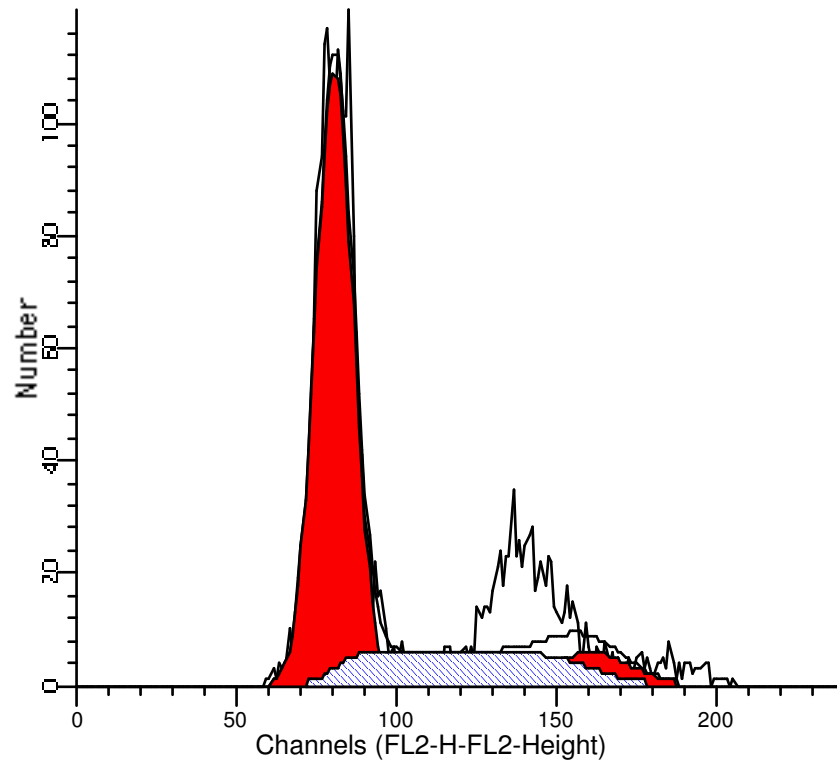


Figure 201: Histogram of MCF-7 cells treated with 100μM thalidomide for 72 hours.

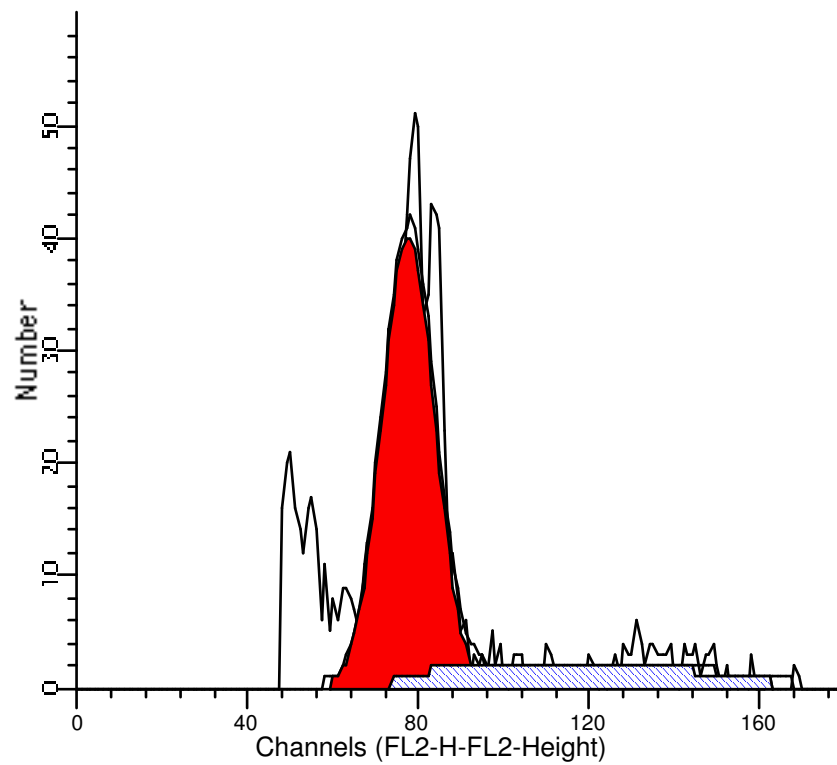


Figure 202: Histogram of MCF-7 cells treated with 300μM thalidomide for 72 hours.

MDA-MB-231/Lycopene

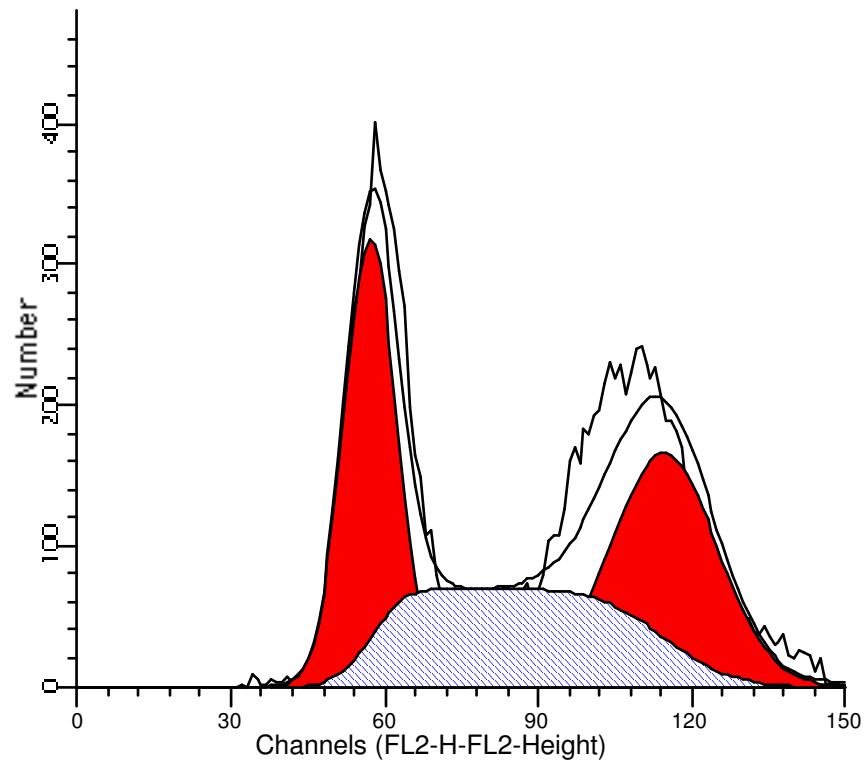


Figure 203: Histogram of MDA-MB-231/lycopene control cells treated with THF for 12 hours.

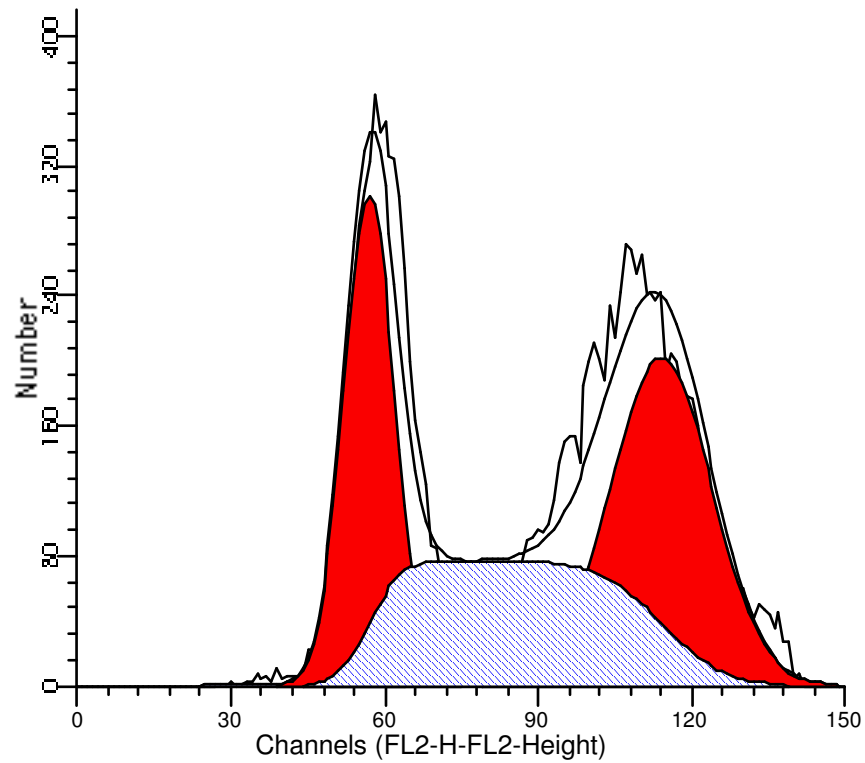


Figure 204: Histogram of MDA-MB-231 cells treated with 2 μ M lycopene for 12 hours.

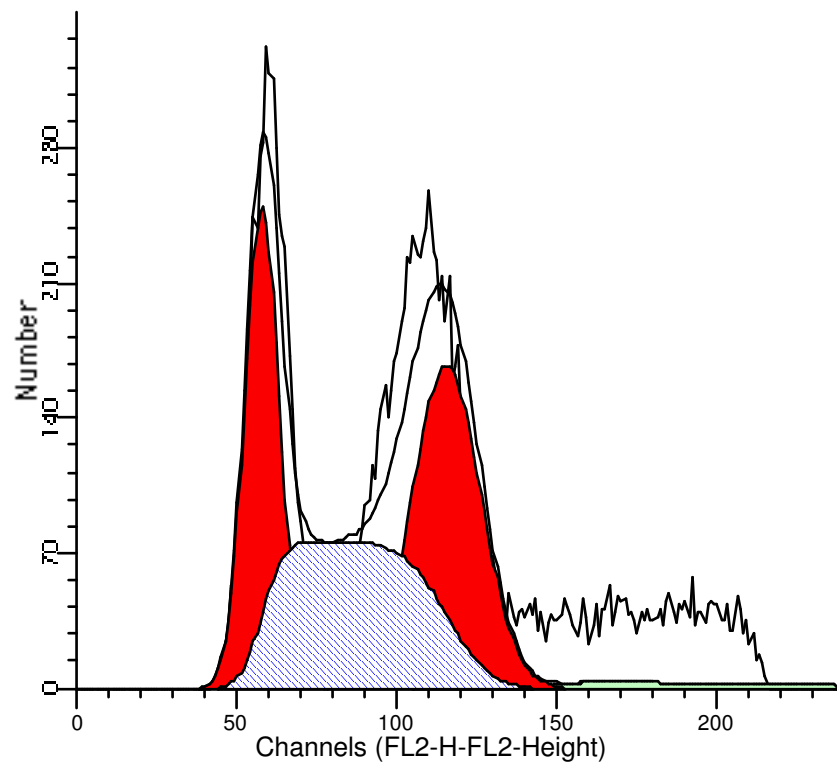


Figure 205: Histogram of MDA-MB-231 cells treated with 5 μ M lycopene for 12 hours.

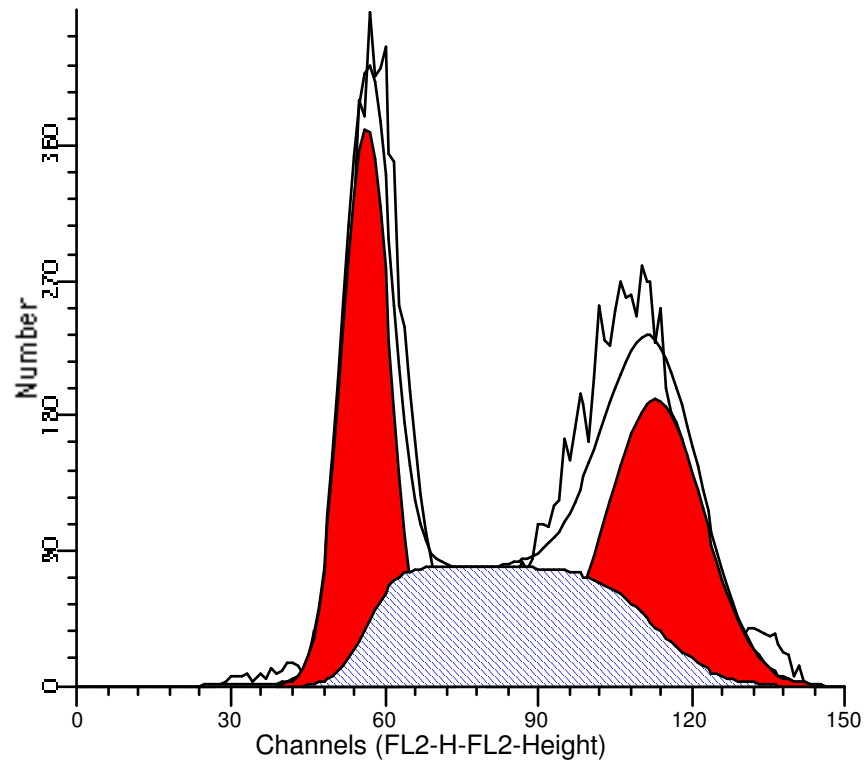


Figure 206: Histogram of MDA-MB-231 cells treated with 10µM lycopene for 12 hours.

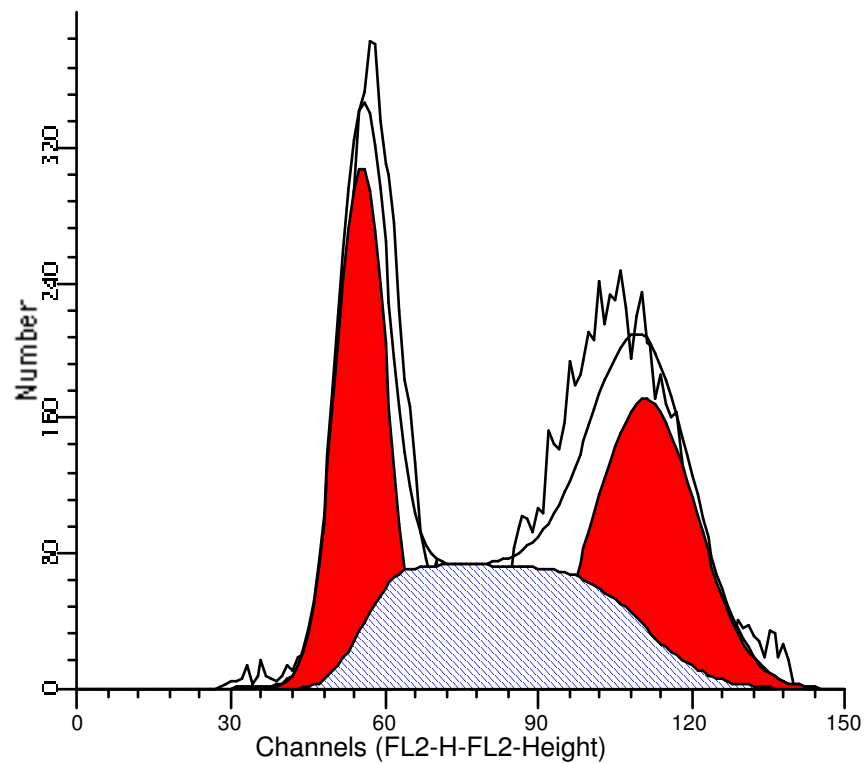


Figure 207: Histogram of MDA-MB-231 cells treated with 20µM lycopene for 12 hours.

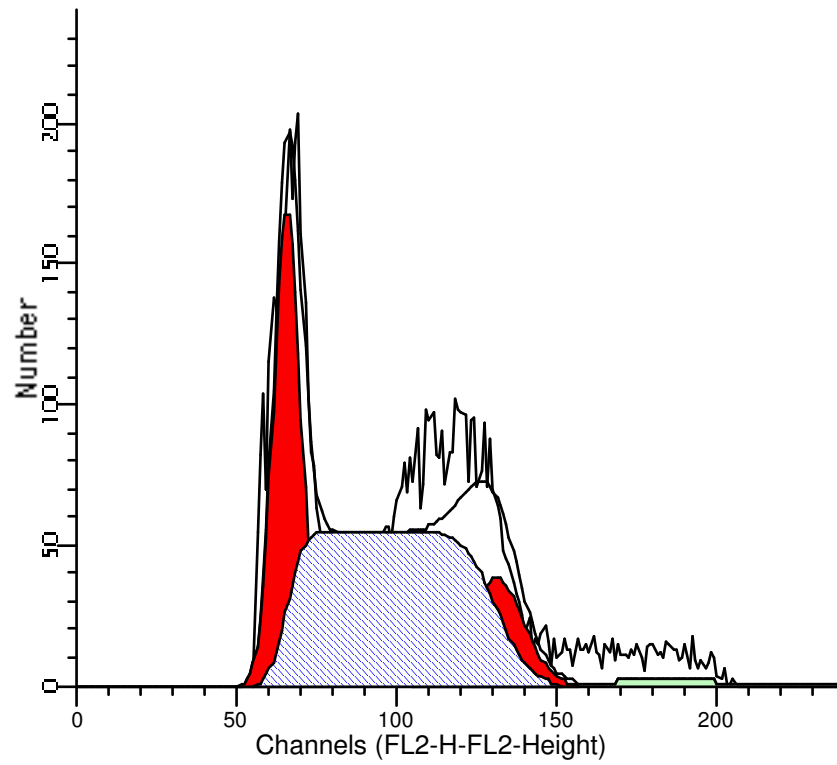


Figure 208: Histogram of MDA-MB-231/lycopene control cells treated with DMSO for 24 hours.

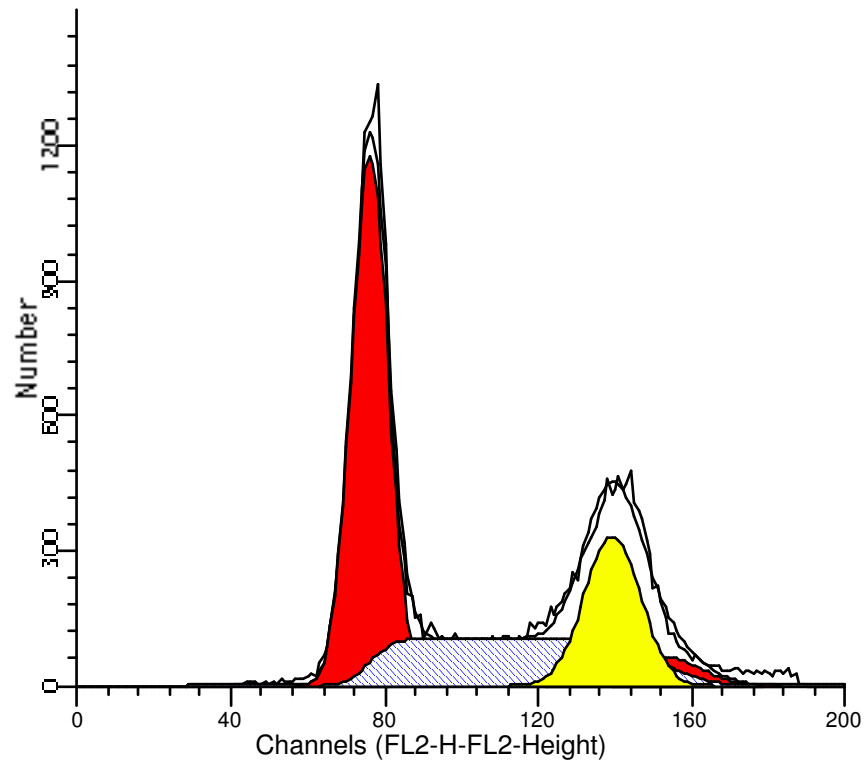


Figure 209: Histogram of MDA-MB-231 cells treated with 2 μ M lycopene for 24 hours.

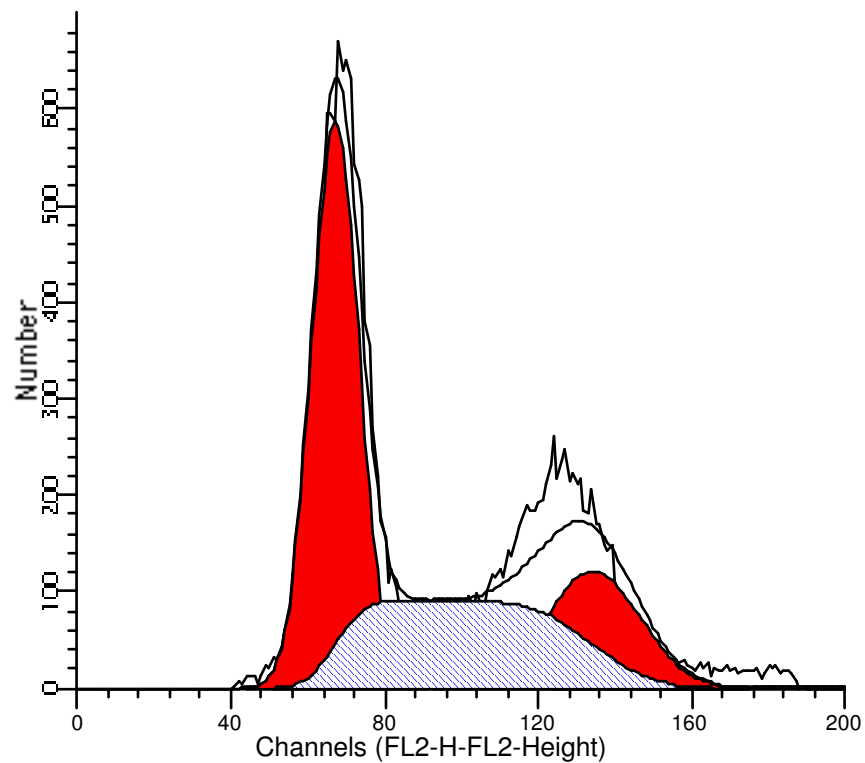


Figure 210: Histogram of MDA-MB-231 cells treated with 5 μ M lycopene for 24 hours.

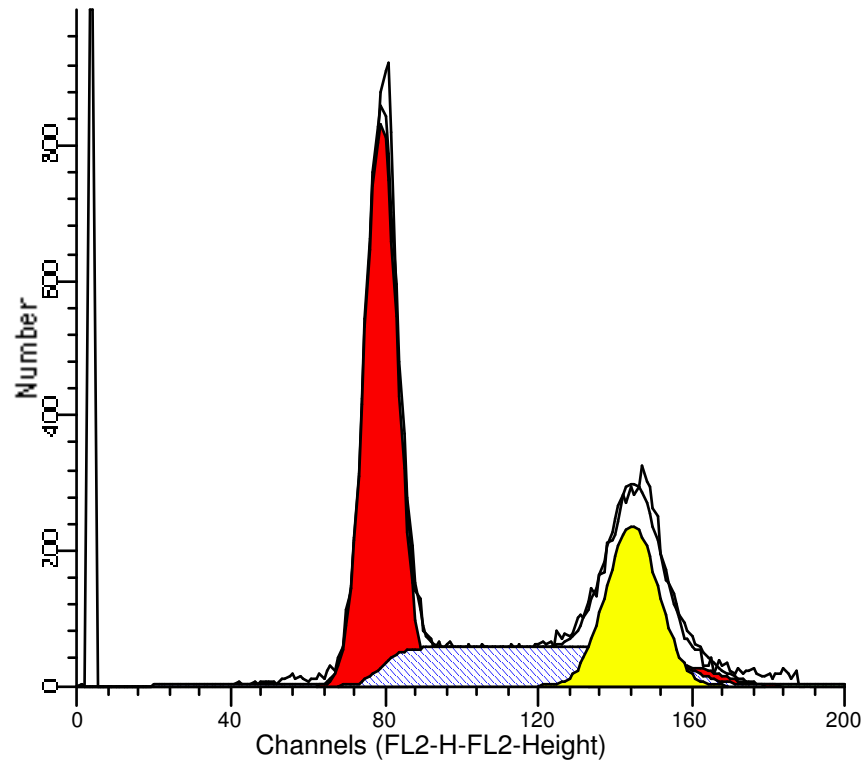


Figure 211: Histogram of MDA-MB-231 cells treated with 10μM lycopene for 24 hours.

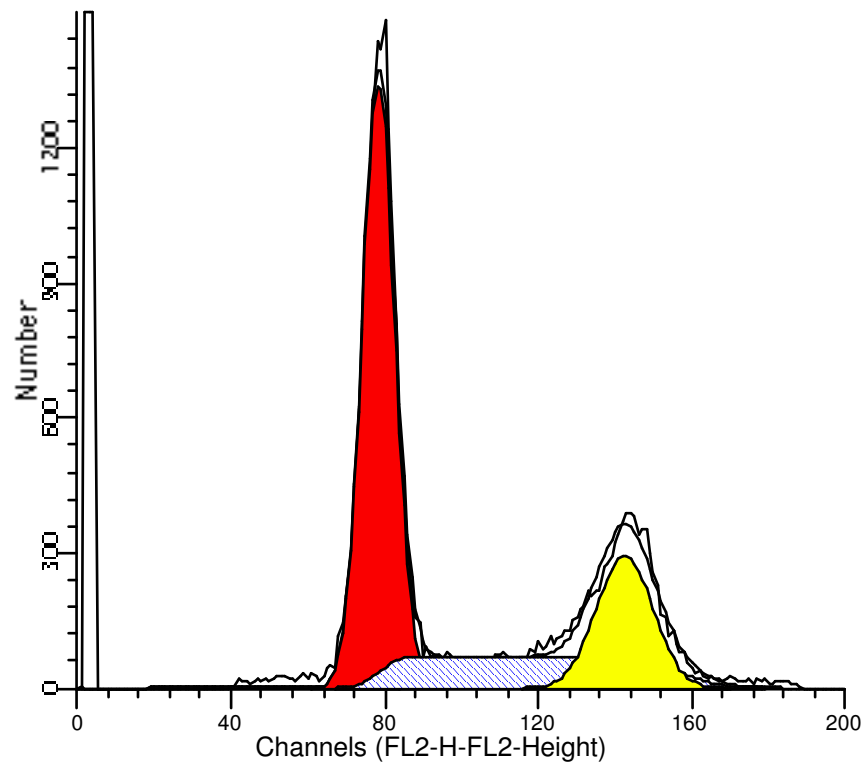


Figure 212: Histogram of MDA-MB-231 cells treated with 20μM lycopene for 24 hours.

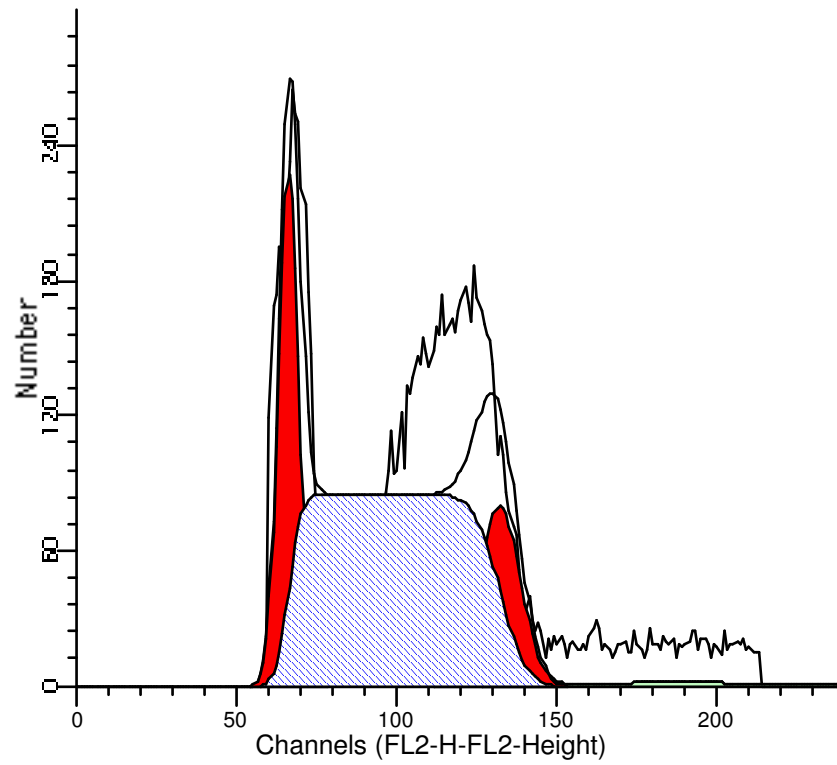


Figure 213: Histogram of MDA-MB-231/lycopene control cells treated with THF for 48 hours.

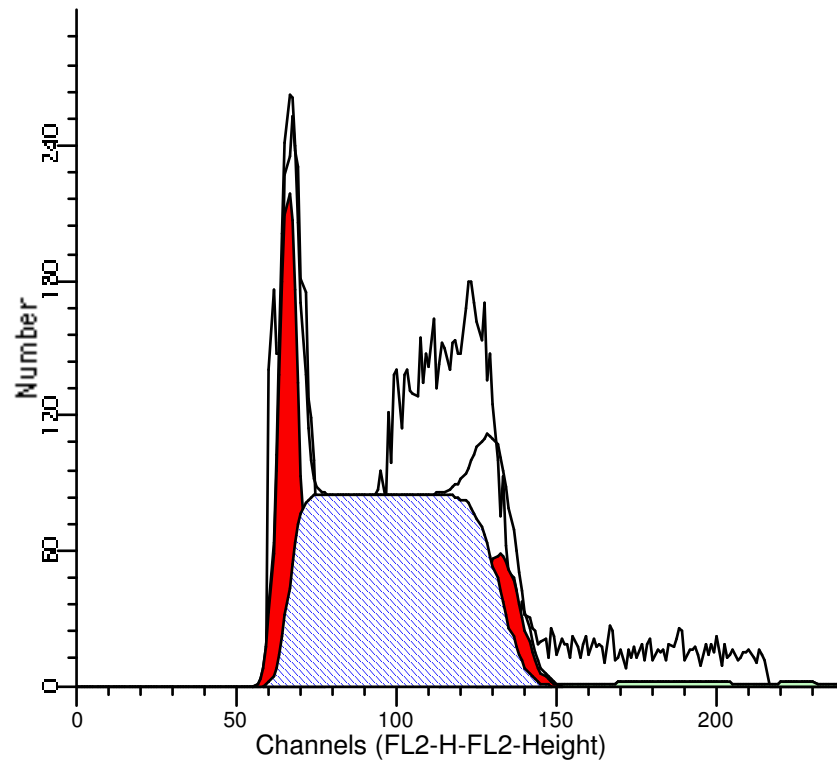


Figure 214: Histogram of MDA-MB-231 cells treated with 2μM lycopene for 48 hours.

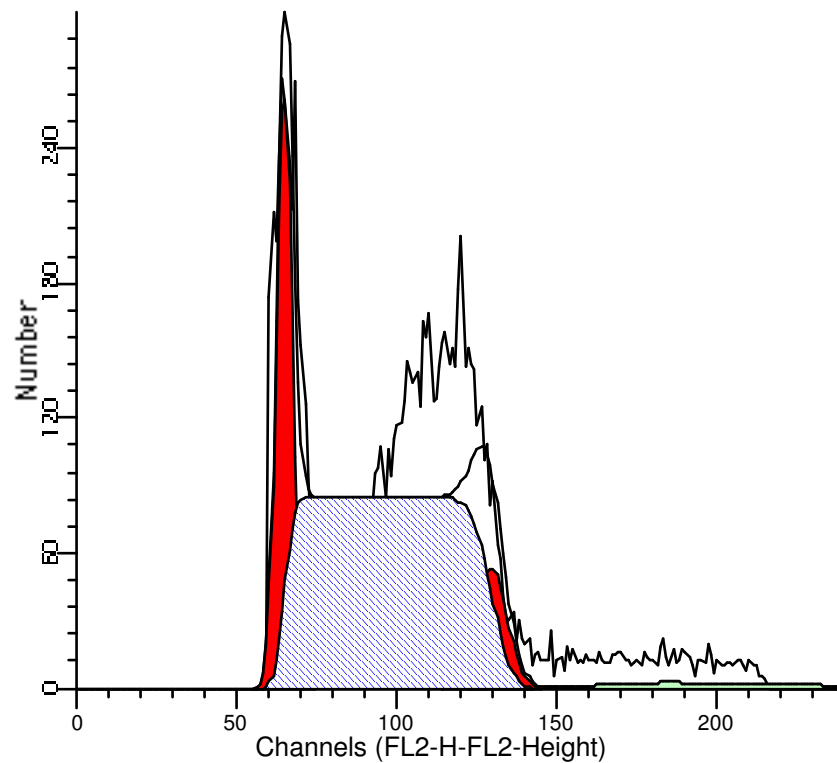


Figure 215: Histogram of MDA-MB-231 cells treated with 5μM lycopene for 48 hours.

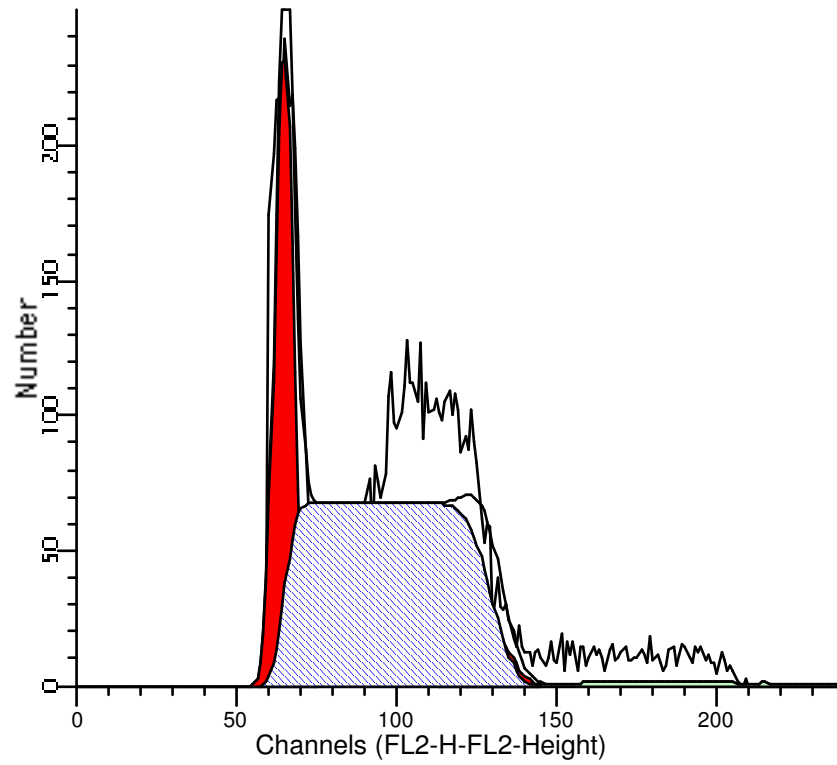


Figure 216: Histogram of MDA-MB-231 cells treated with 10μM lycopene for 48 hours.

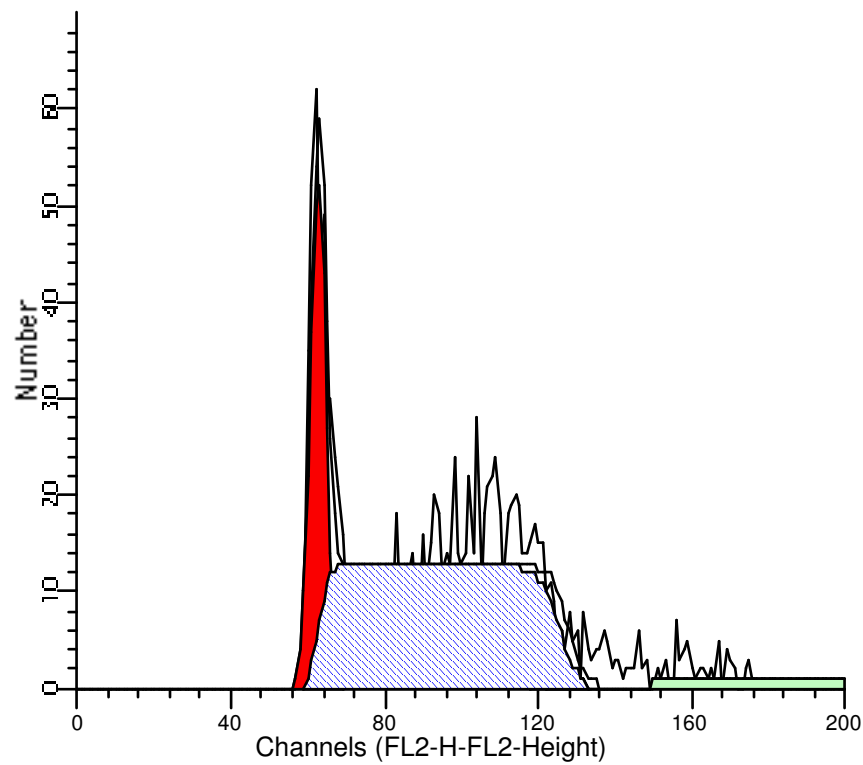


Figure 217: Histogram of MDA-MB-231 cells treated with 20μM lycopene for 48 hours.

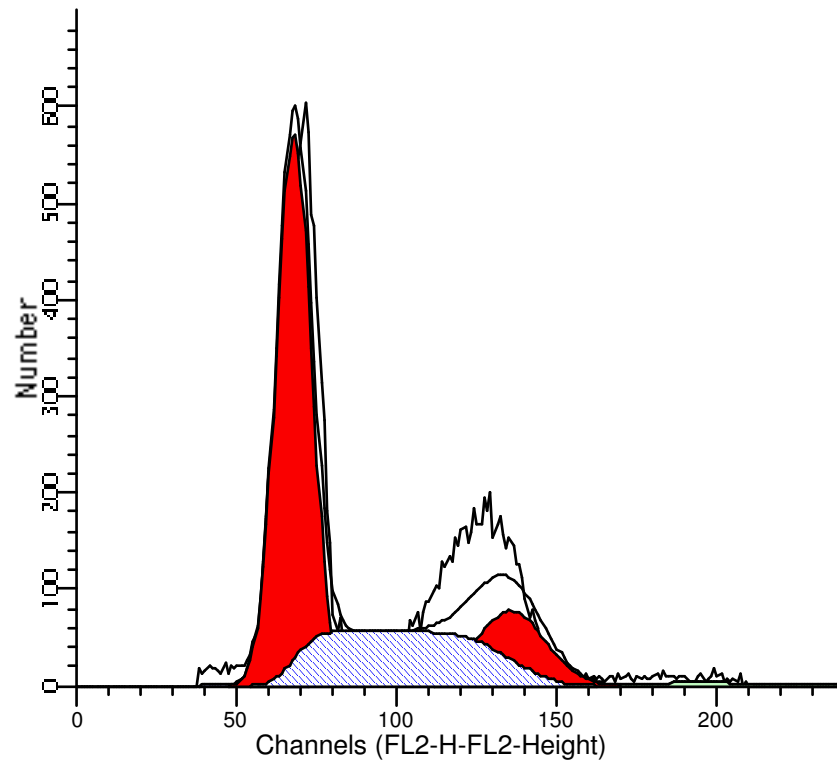


Figure 218: Histogram of MDA-MB-231 cells treated with 2 μ M lycopene for 72 hours.

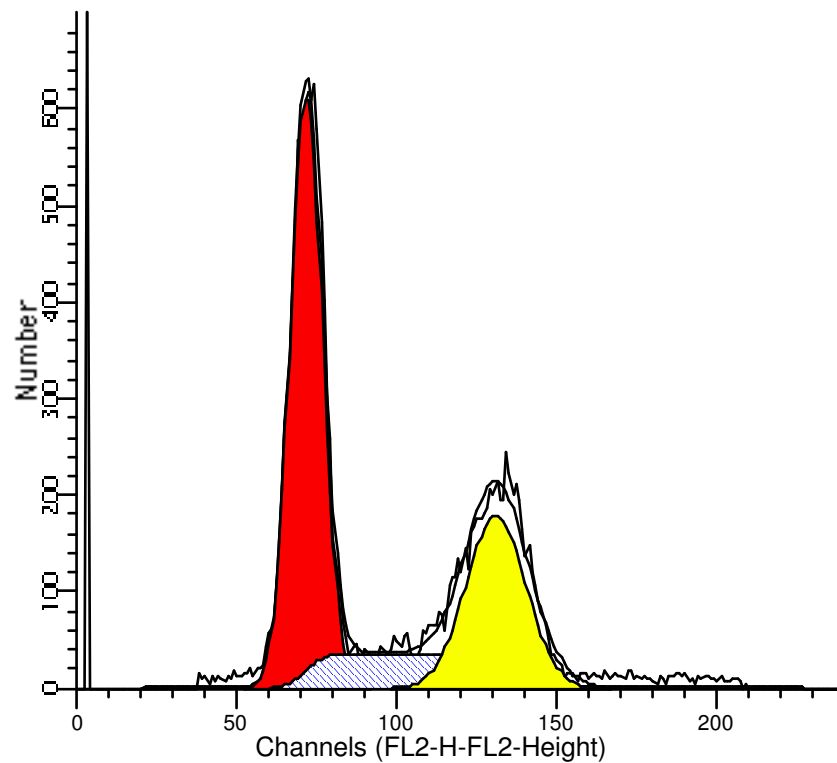


Figure 219: Histogram of MDA-MB-231 cells treated with 5 μ M lycopene for 72 hours.

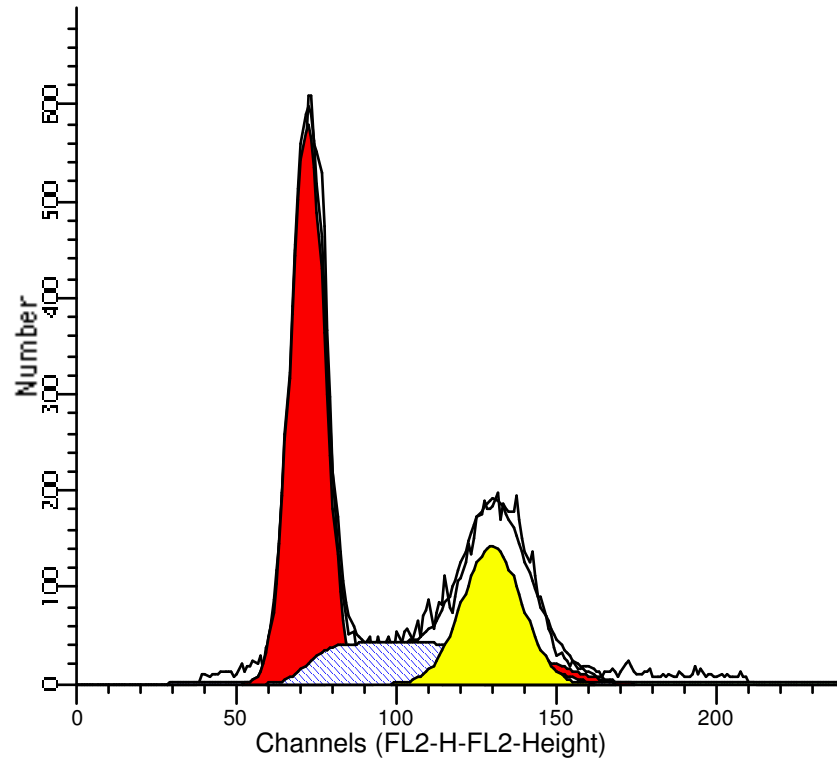


Figure 220: Histogram of MDA-MB-231 cells treated with 10µM lycopene for 72 hours.

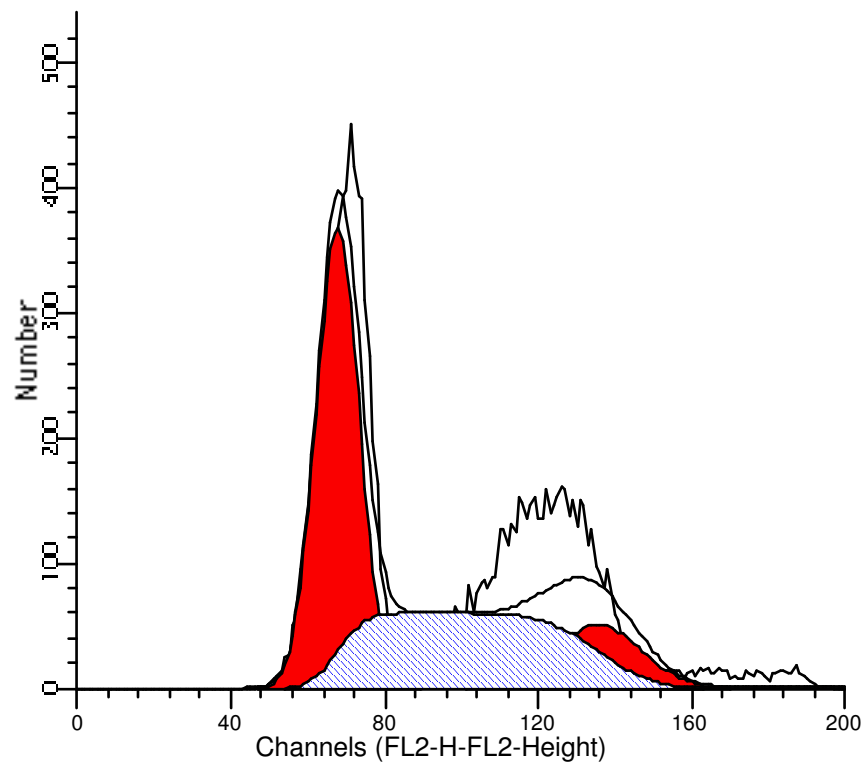


Figure 221: Histogram of MDA-MB-231 cells treated with 20µM lycopene for 72 hours.

MDA-MB-231/Thalidomide

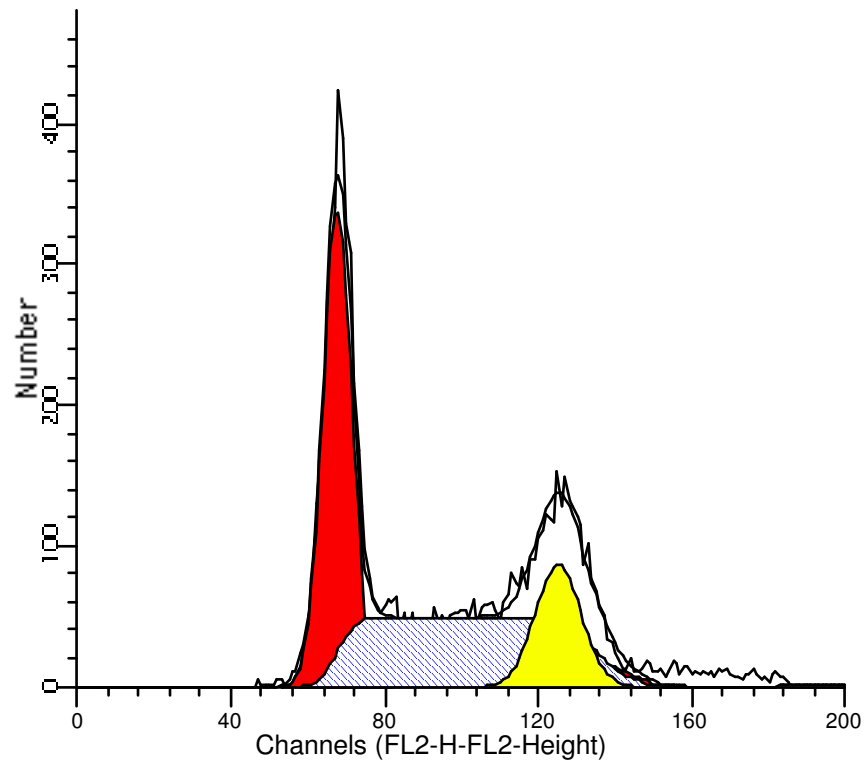


Figure 222: Histogram of MDA-MB-231/thalidomide control cells treated with DMSO
for 12 hours.

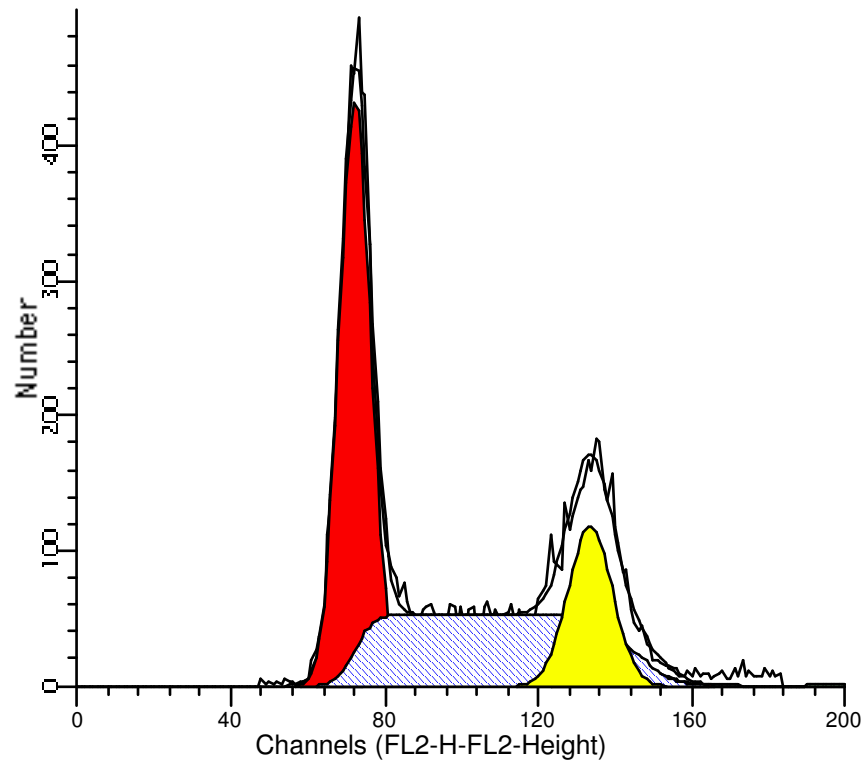


Figure 223: Histogram of MDA-MB-231 cells treated with 10 μ M thalidomide for 12 hours.

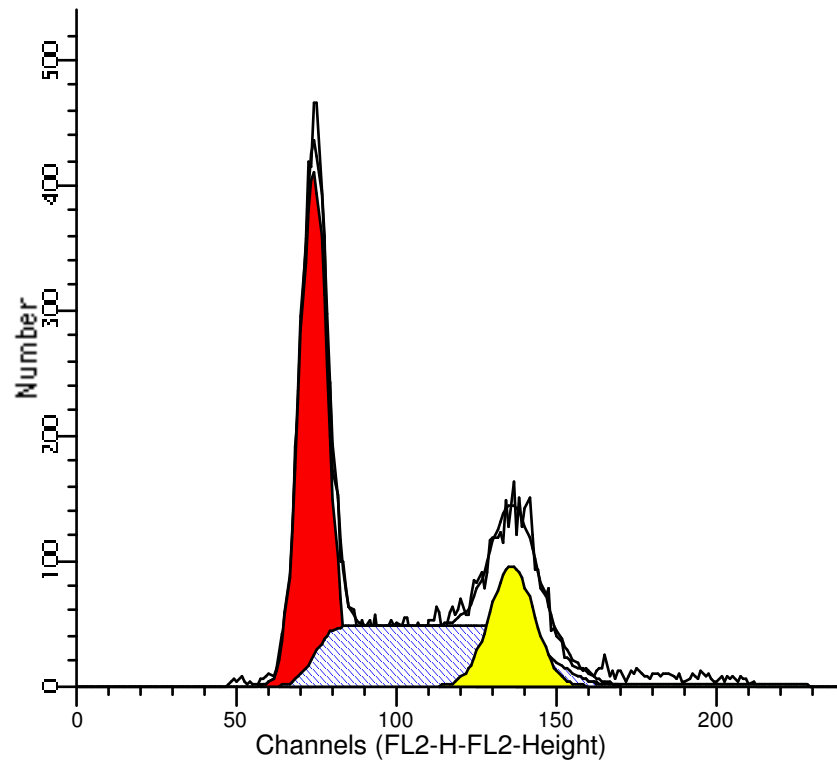


Figure 224: Histogram of MDA-MB-231 cells treated with 30 μ M thalidomide for 12 hours.

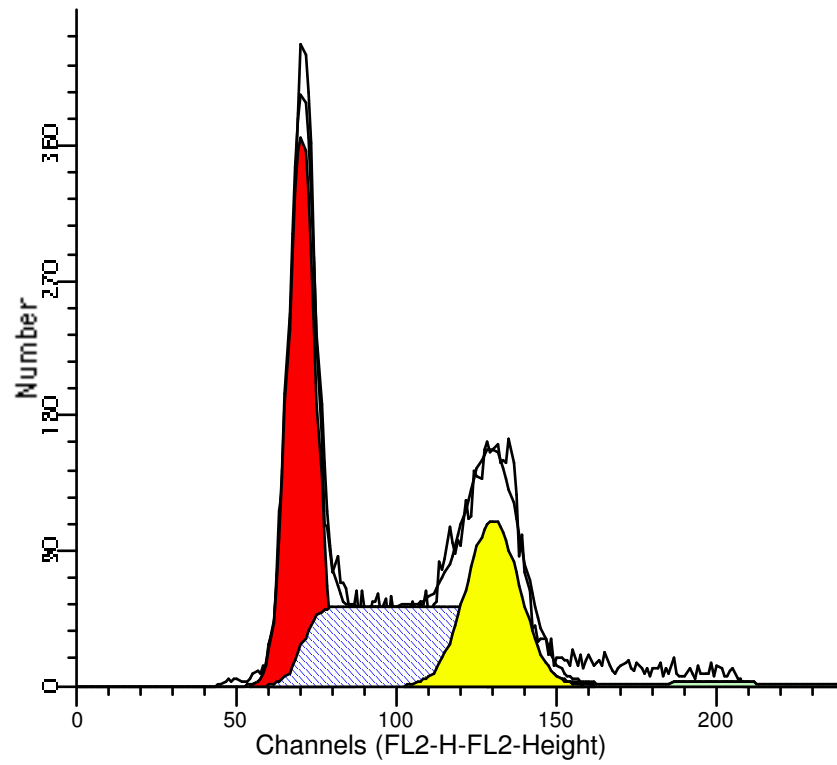


Figure 225: Histogram of MDA-MB-231 cells treated with 100 μ M thalidomide for 12 hours.

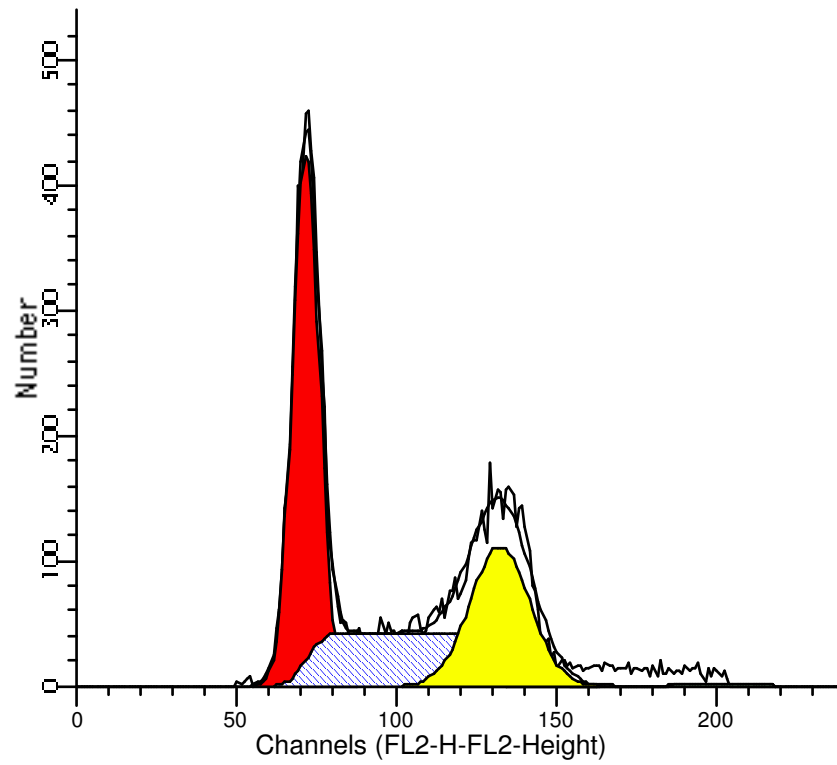


Figure 226: Histogram of MDA-MB-231 cells treated with 300 μ M thalidomide for 12 hours.

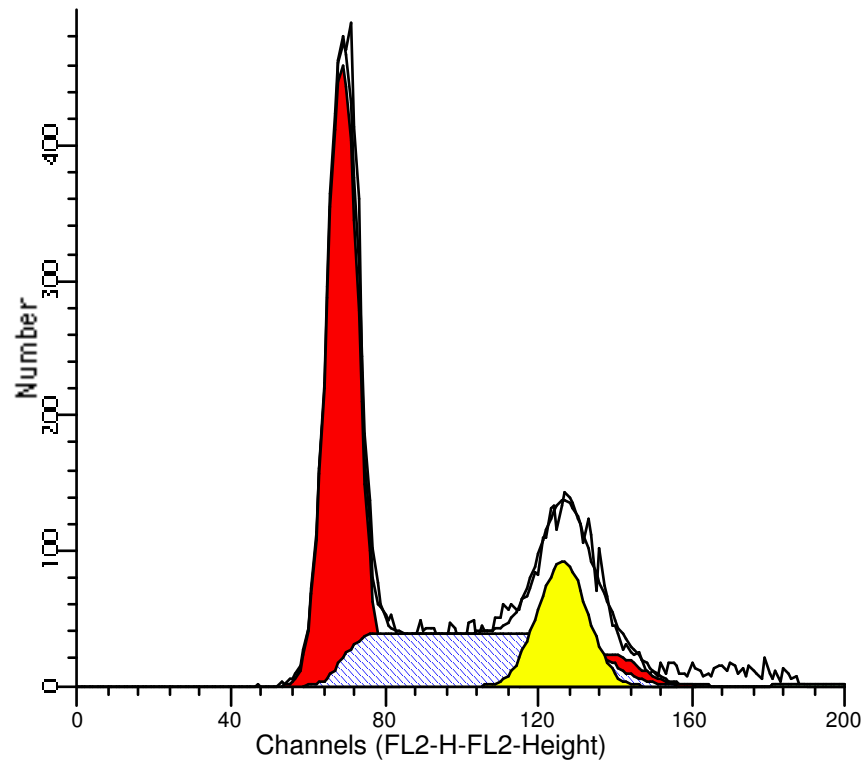


Figure 227: Histogram of MDA-MB-231 cells treated with 10 μ M thalidomide for 24 hours.

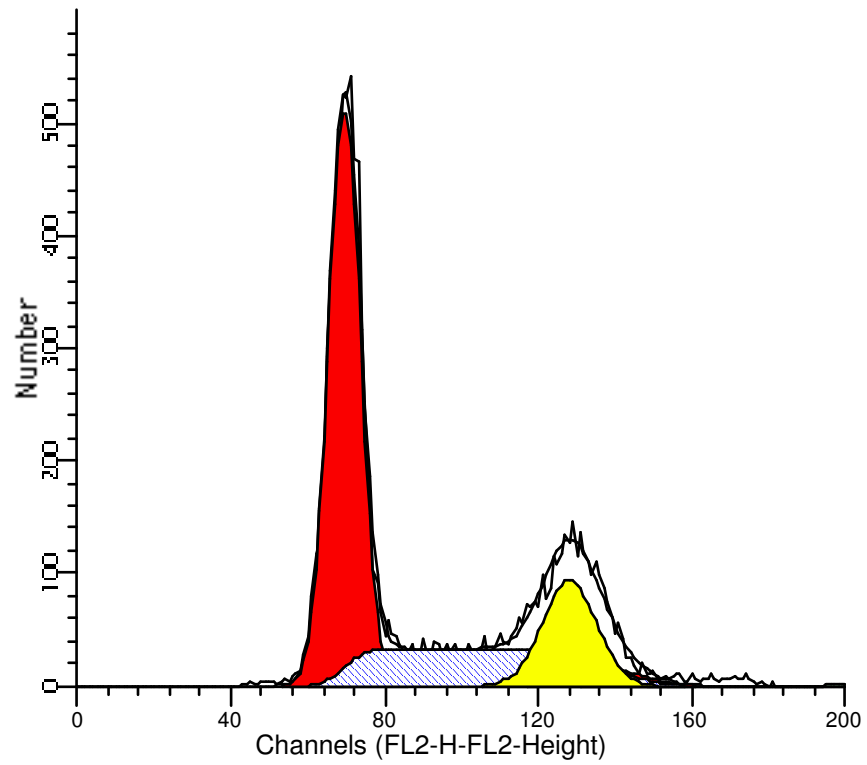


Figure 228: Histogram of MDA-MB-231 cells treated with 30 μ M thalidomide for 24 hours.

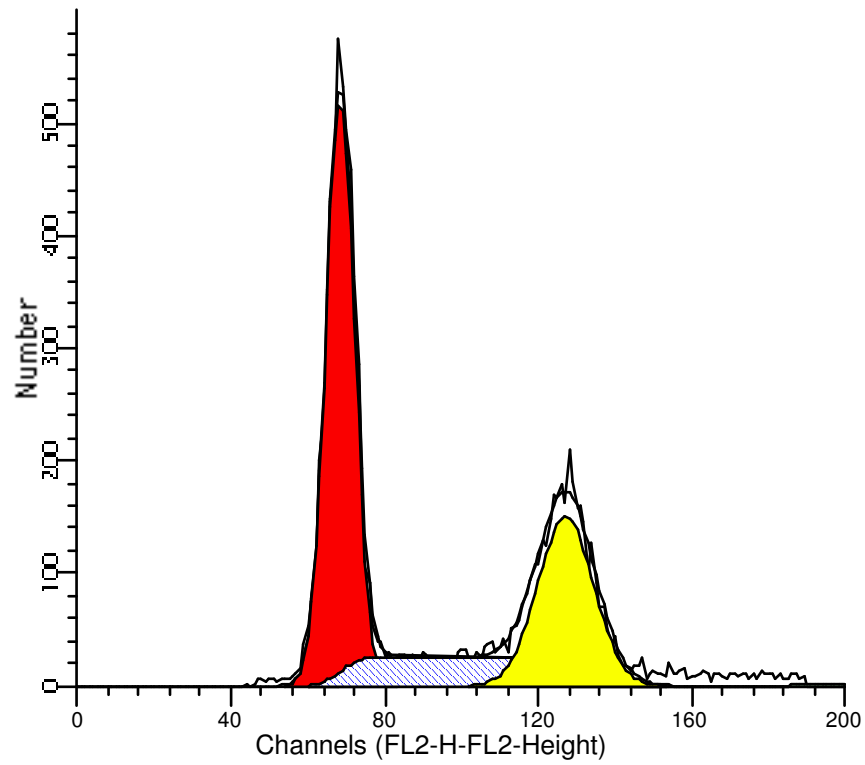


Figure 229: Histogram of MDA-MB-231 cells treated with 100 μ M thalidomide for 24 hours.

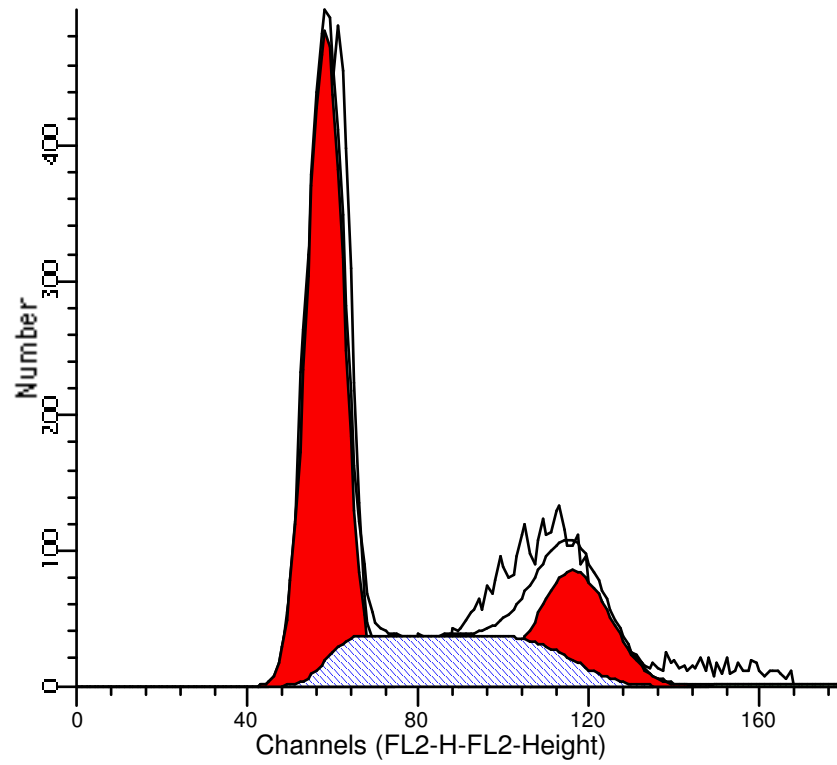


Figure 230: Histogram of MDA-MB-231/thalidomide control cells treated with DMSO for 48 hours.

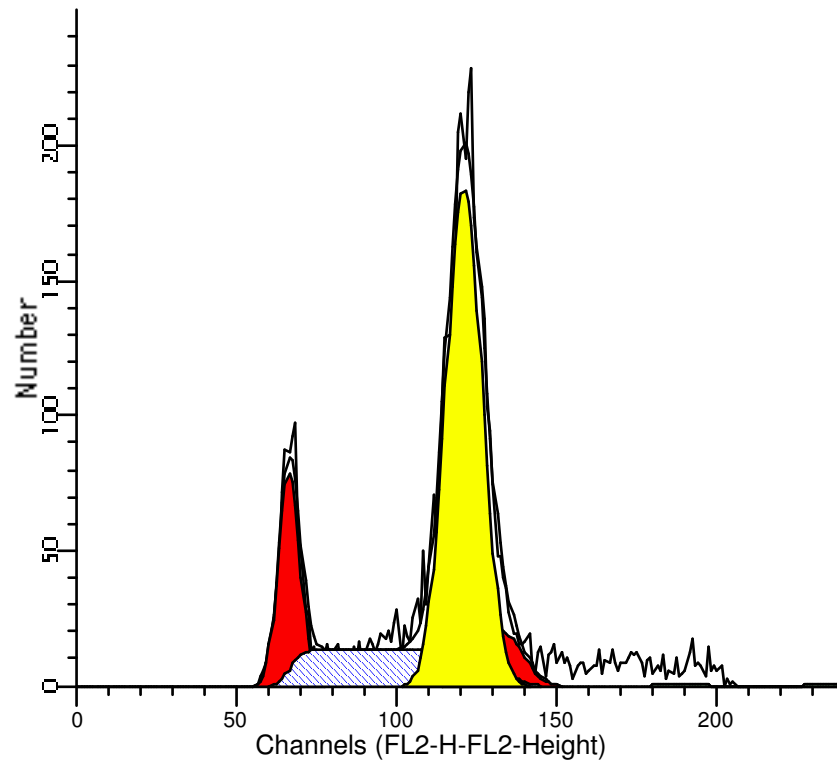


Figure 231: Histogram of MDA-MB-231 cells treated with 10 μ M thalidomide for 48 hours.

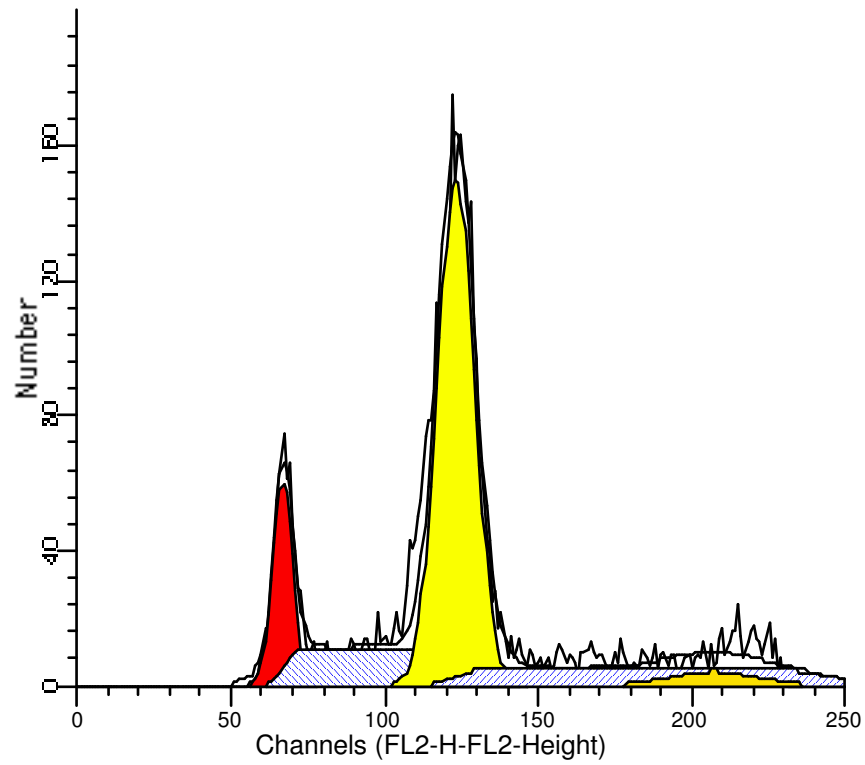


Figure 232: Histogram of MDA-MB-231 cells treated with 30 μ M thalidomide for 48 hours.

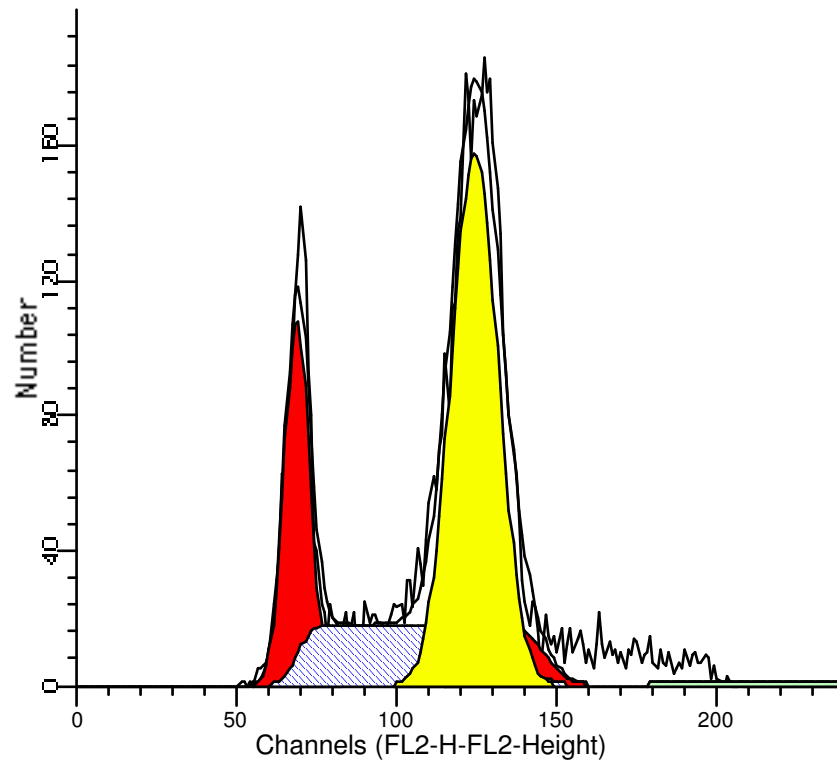


Figure 233: Histogram of MDA-MB-231 cells treated with 100 μ M thalidomide for 48 hours.

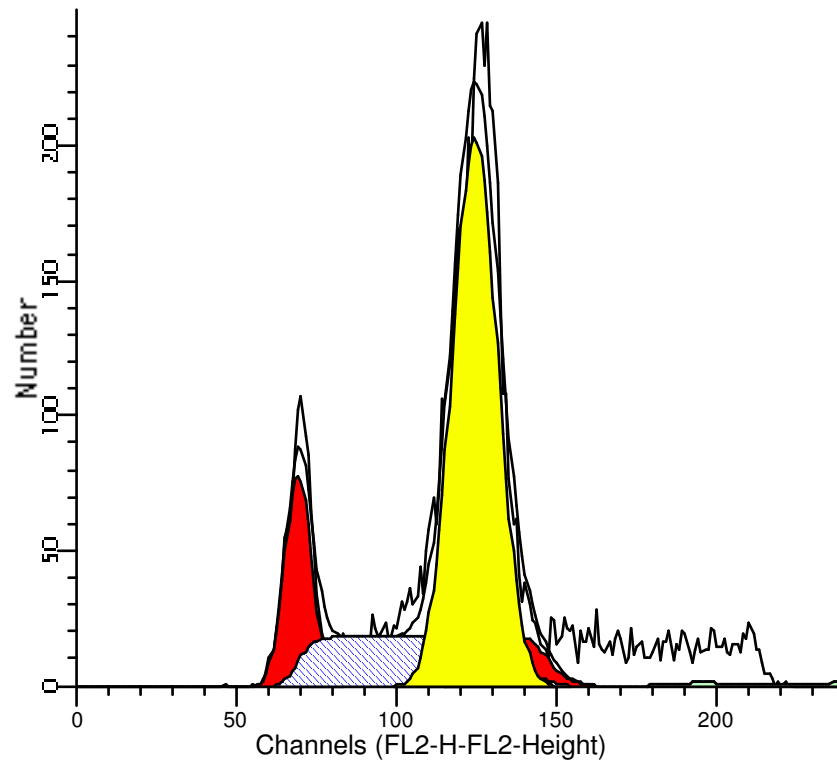


Figure 234: Histogram of MDA-MB-231 cells treated with 300 μ M thalidomide for 48 hours.

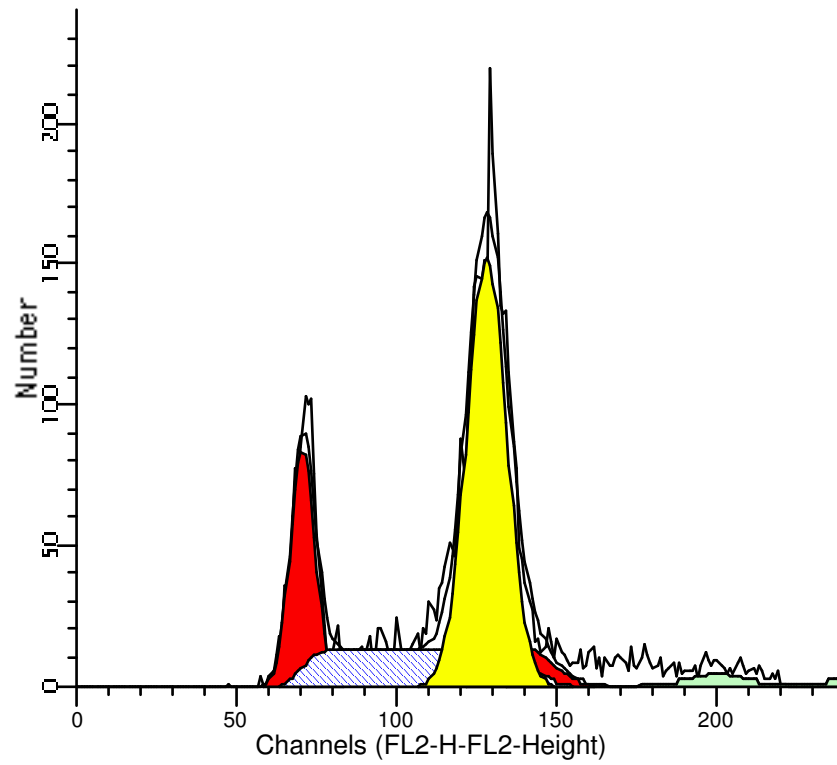


Figure 235: Histogram of MDA-MB-231/thalidomide control cells treated with DMSO for 72 hours.

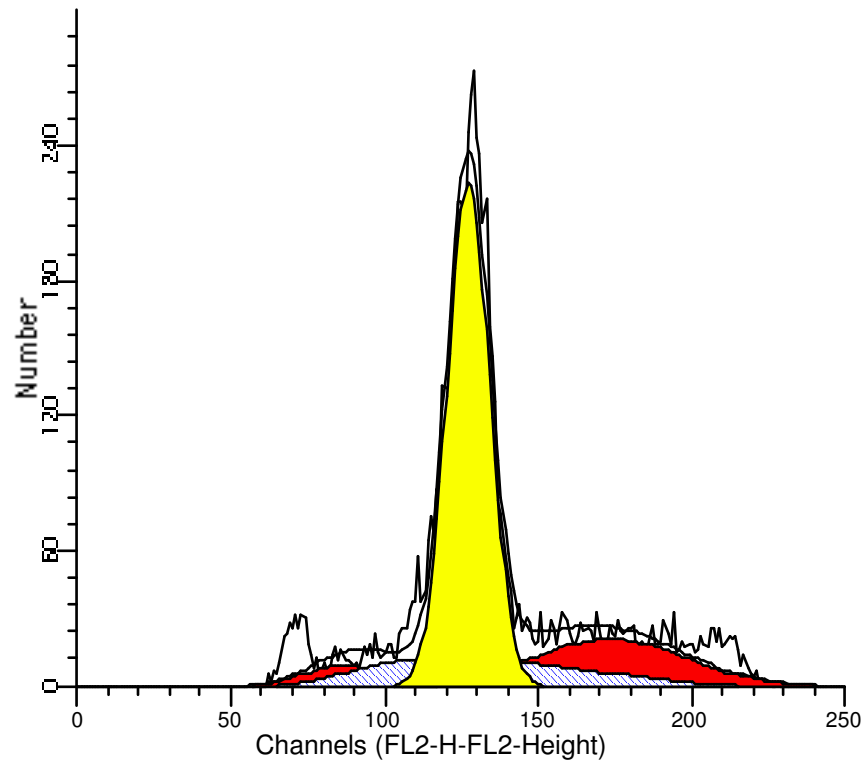


Figure 236: Histogram of MDA-MB-231 cells treated with 10 μ M thalidomide for 72 hours.

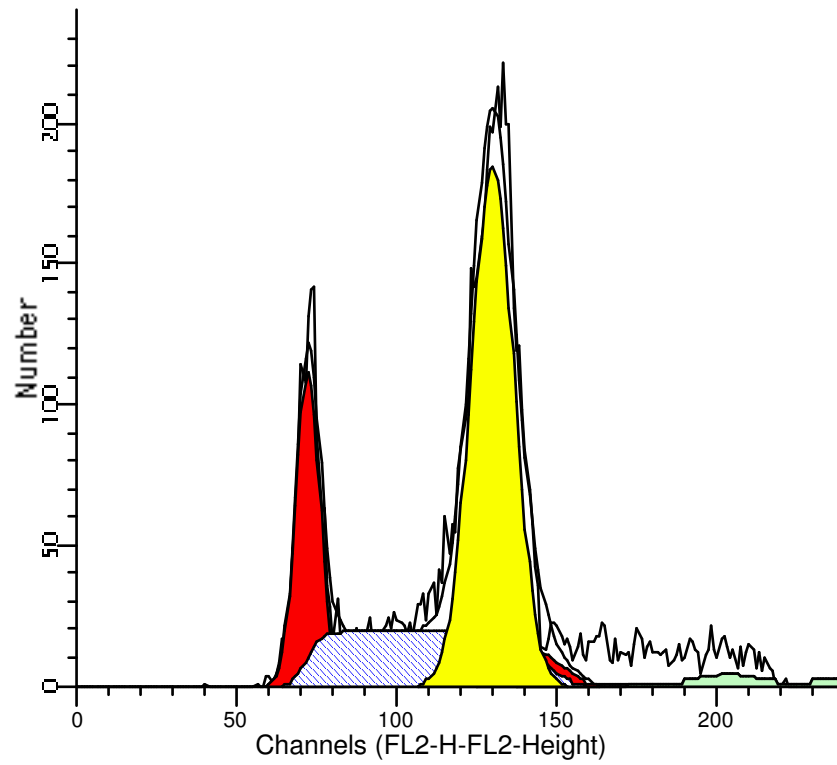


Figure 237: Histogram of MDA-MB-231 cells treated with 30 μ M thalidomide for 72 hours.

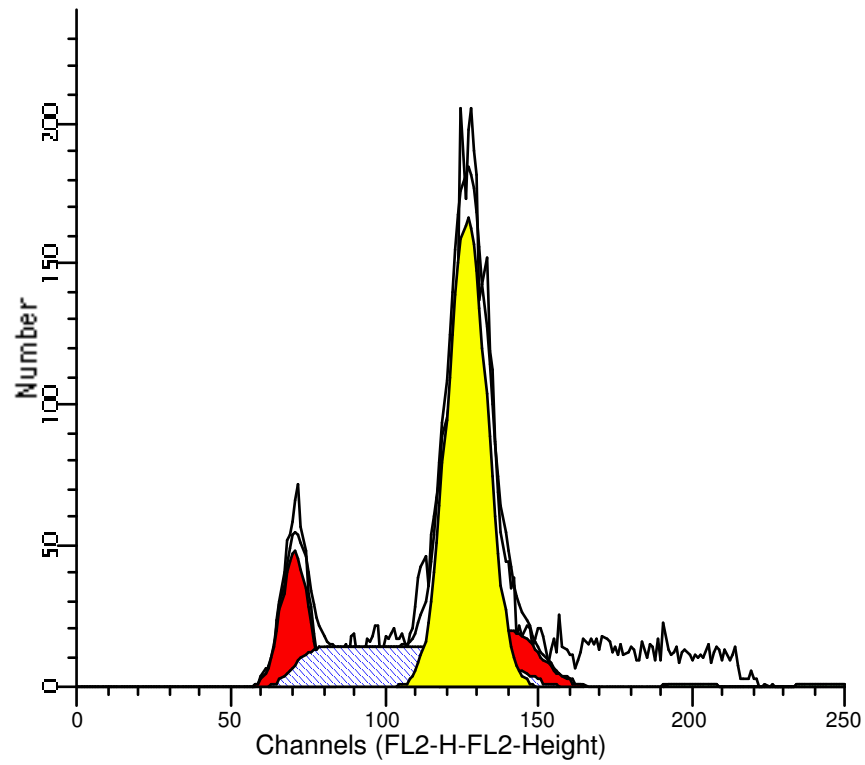


Figure 238: Histogram of MDA-MB-231 cells treated with 100 μ M thalidomide for 72 hours.

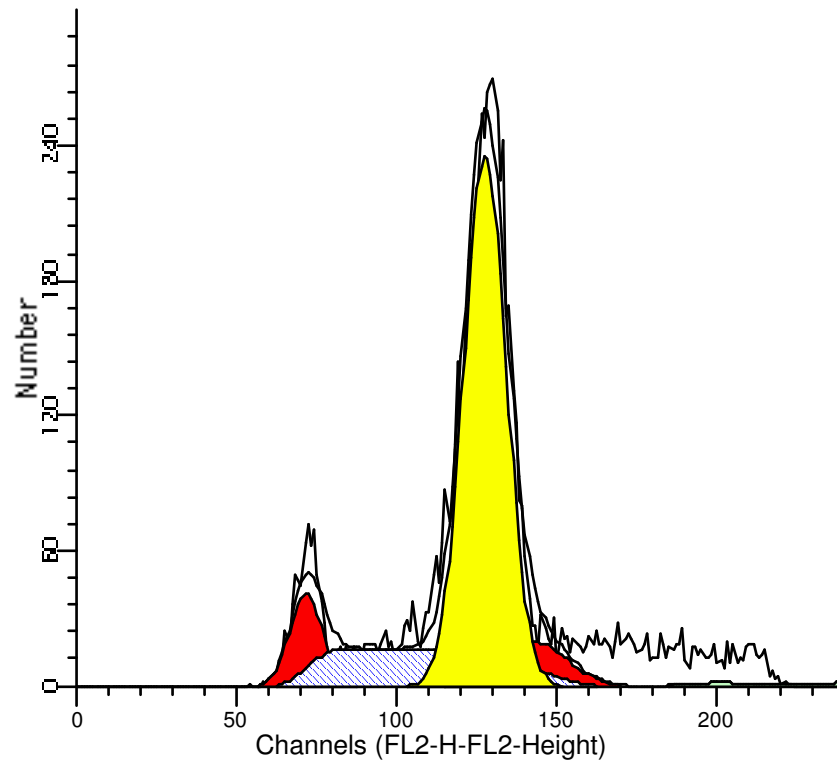


Figure 239: Histogram of MDA-MB-231 cells treated with 300 μ M thalidomide for 72 hours.

184A1/Lycopene

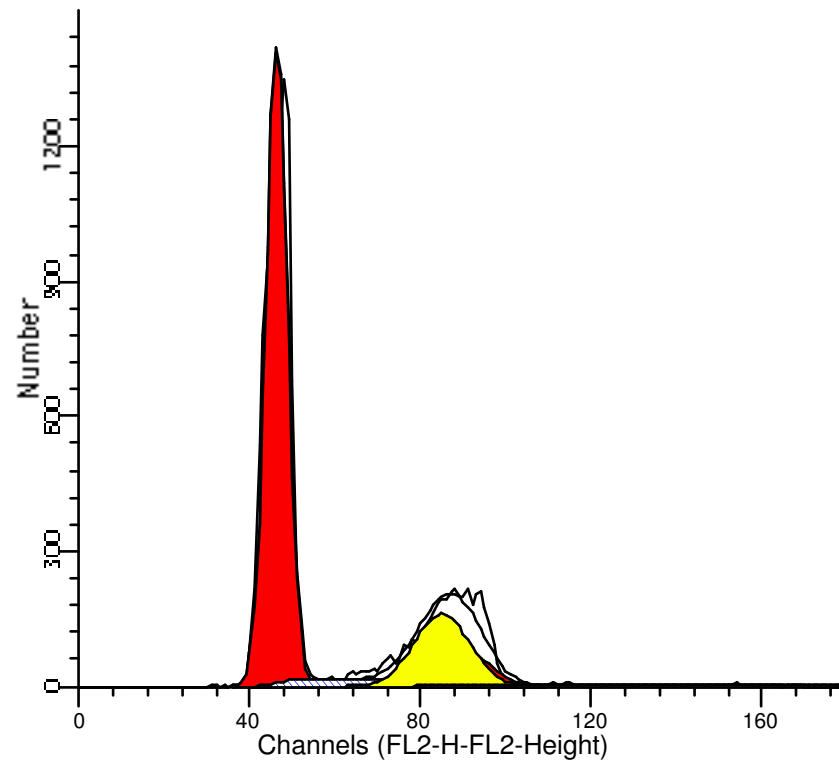


Figure 240: Histogram of 184A1/lycopene control cells treated with THF for 12 hours.

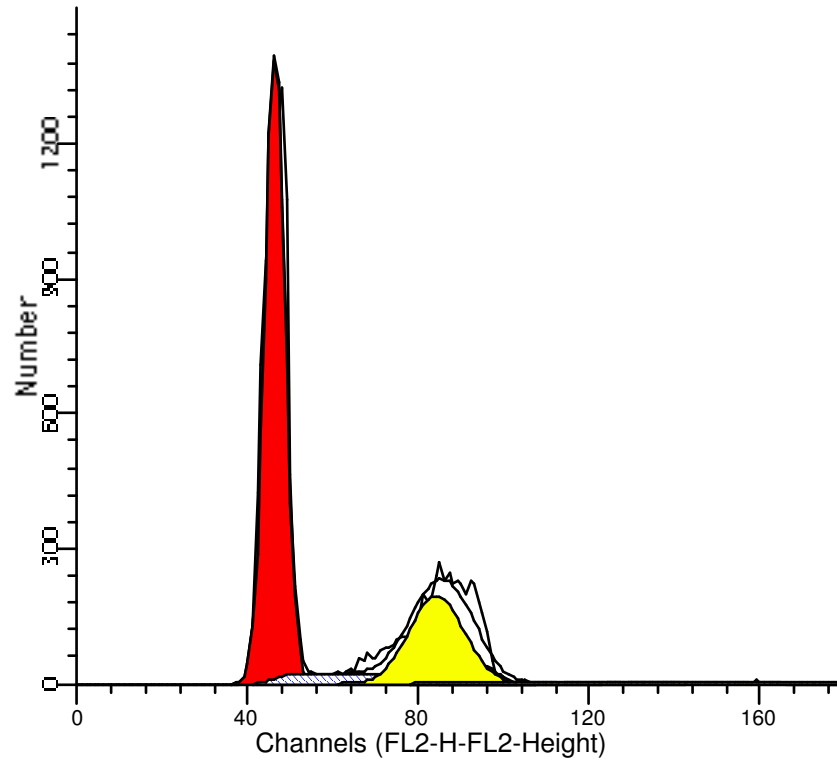


Figure 241: Histogram of 184A1 cells treated with 2μM lycopene for 12 hours.

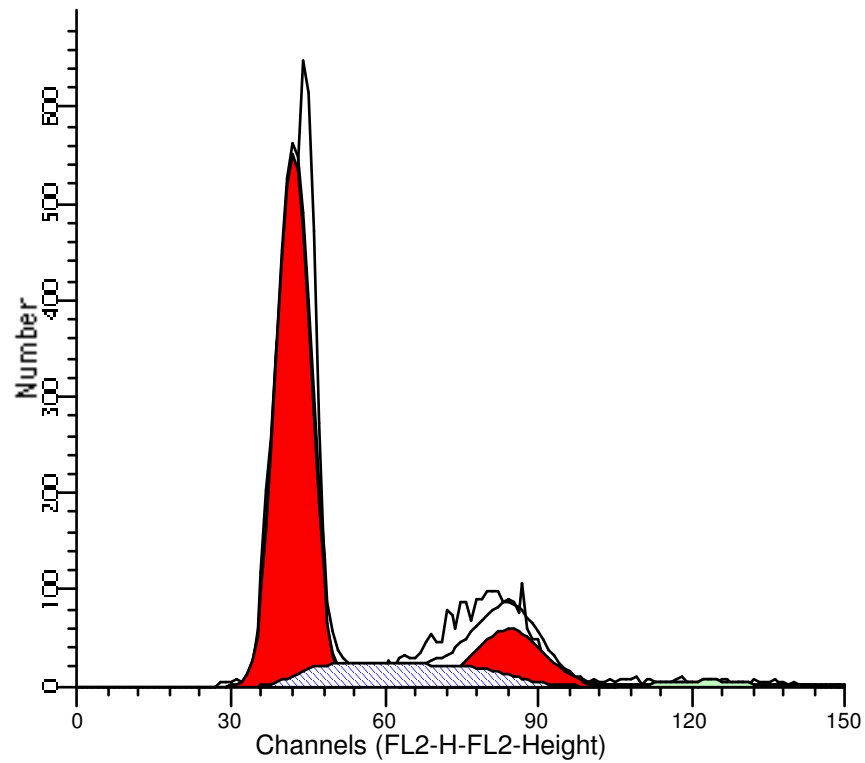


Figure 242: Histogram of 184A1 cells treated with 5μM lycopene for 12 hours.

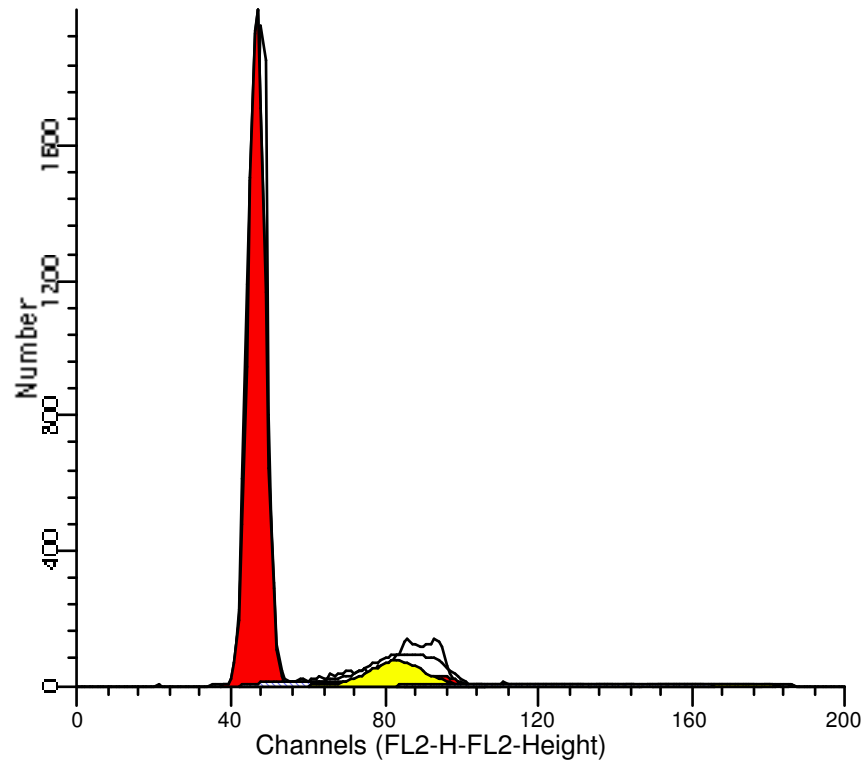


Figure 243: Histogram of 184A1 cells treated with 10µM lycopene for 12 hours.

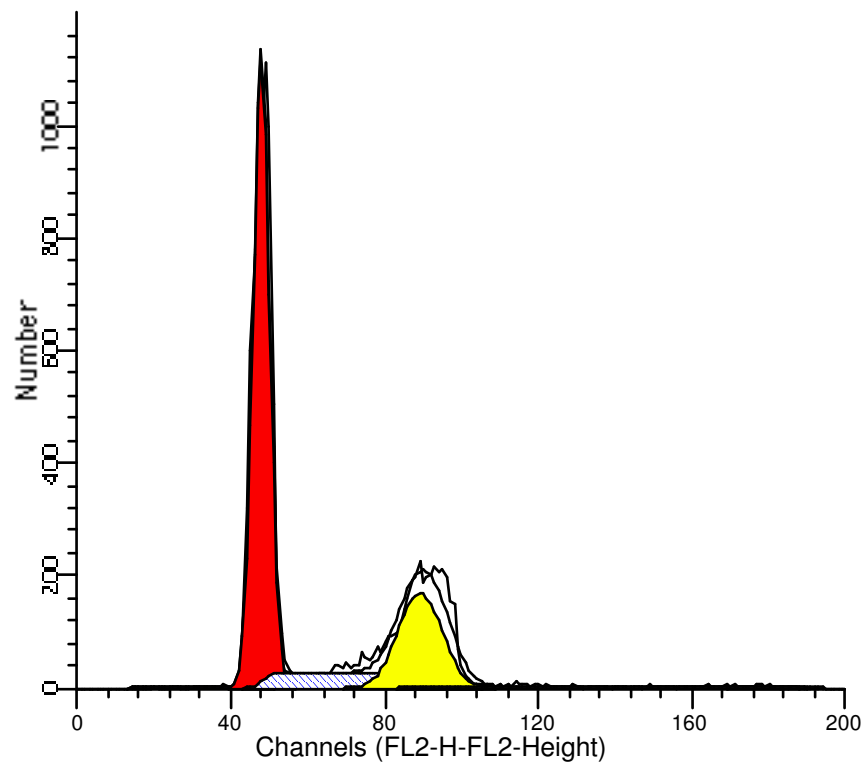


Figure 244: Histogram of 184A1 cells treated with 20µM lycopene for 12 hours.

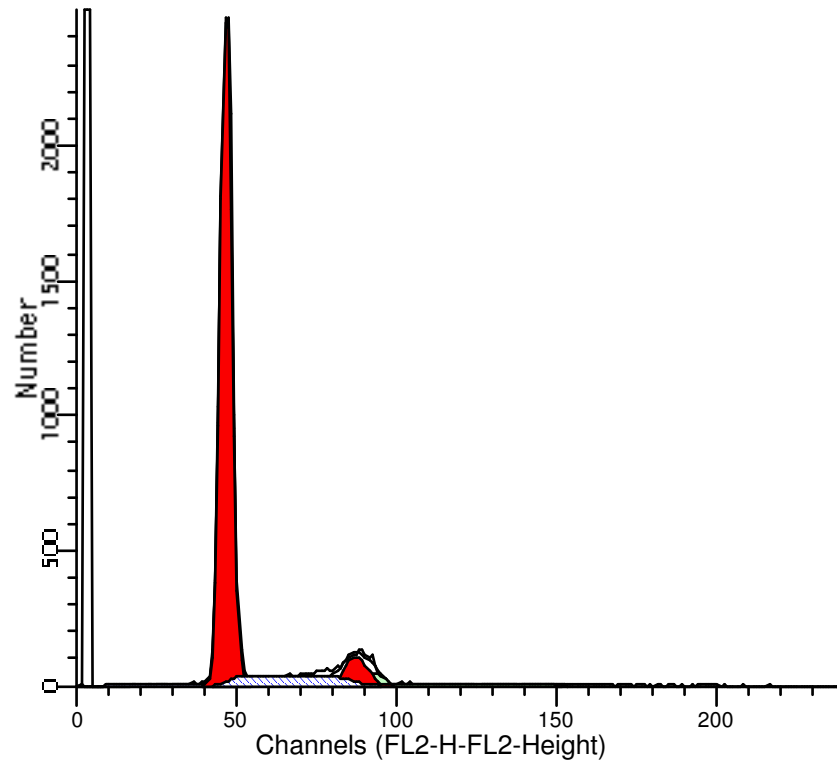


Figure 245: Histogram of 184A1/lycopene control cells treated with THF for 24 hours.

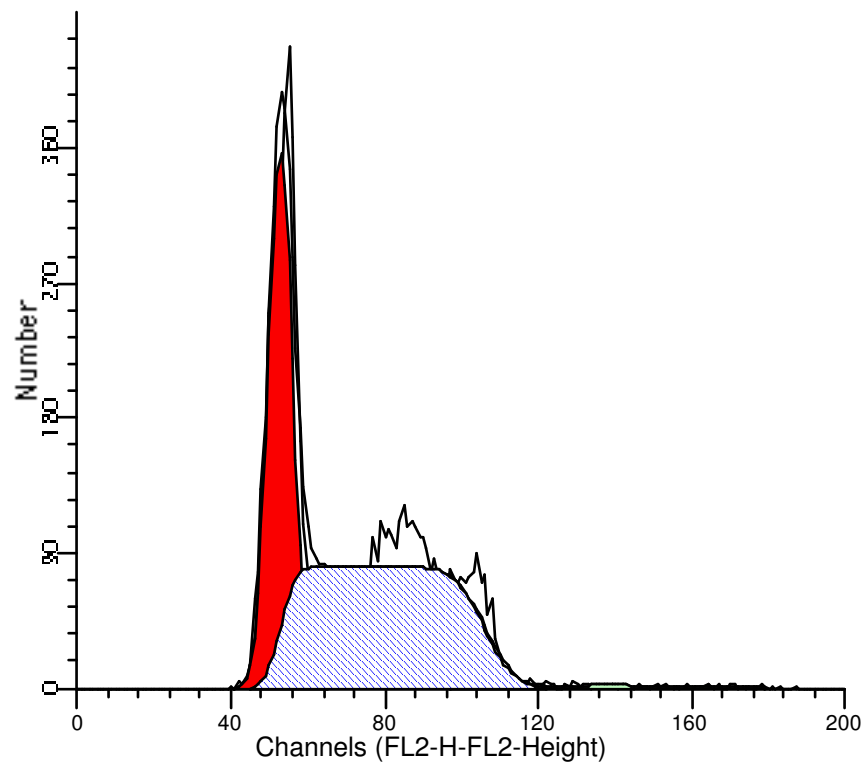


Figure 246: Histogram of 184A1 cells treated with 2 μ M lycopene for 24 hours.

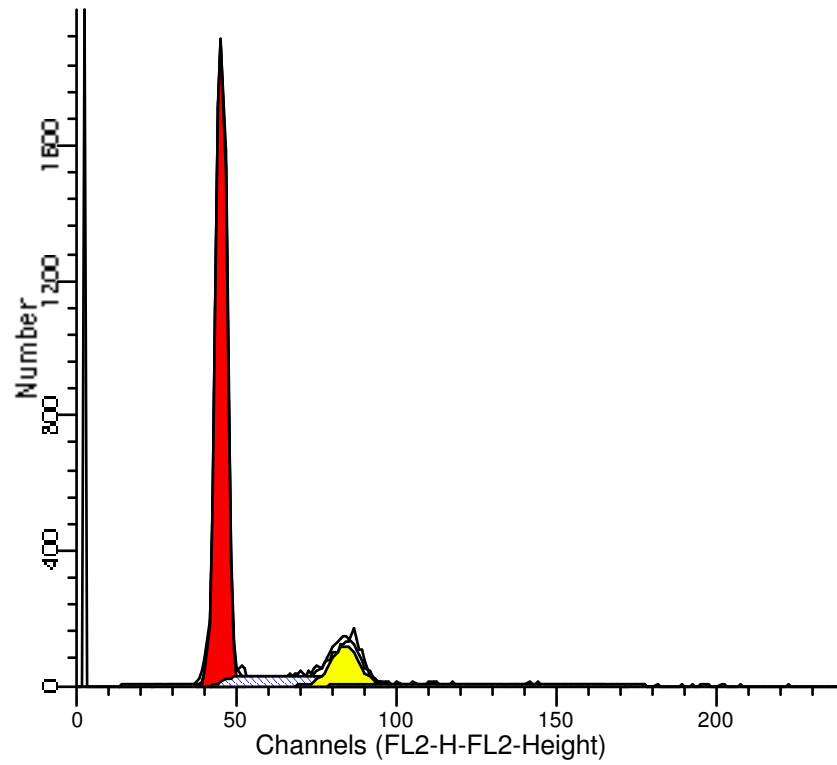


Figure 247: Histogram of 184A1 cells treated with 5µM lycopene for 24 hours.

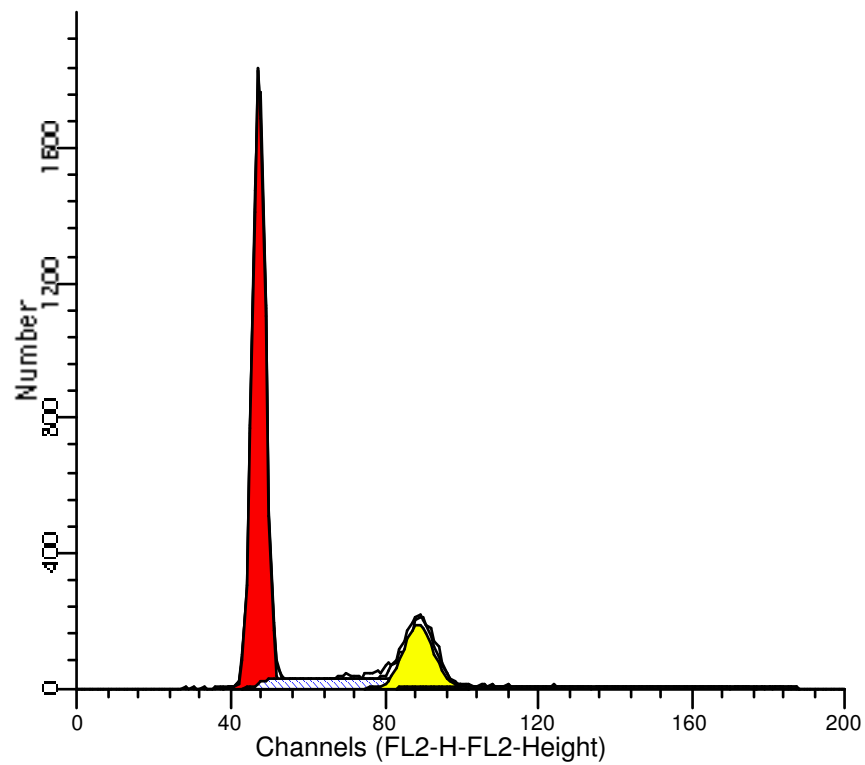


Figure 248: Histogram of 184A1 cells treated with 10µM lycopene for 24 hours.

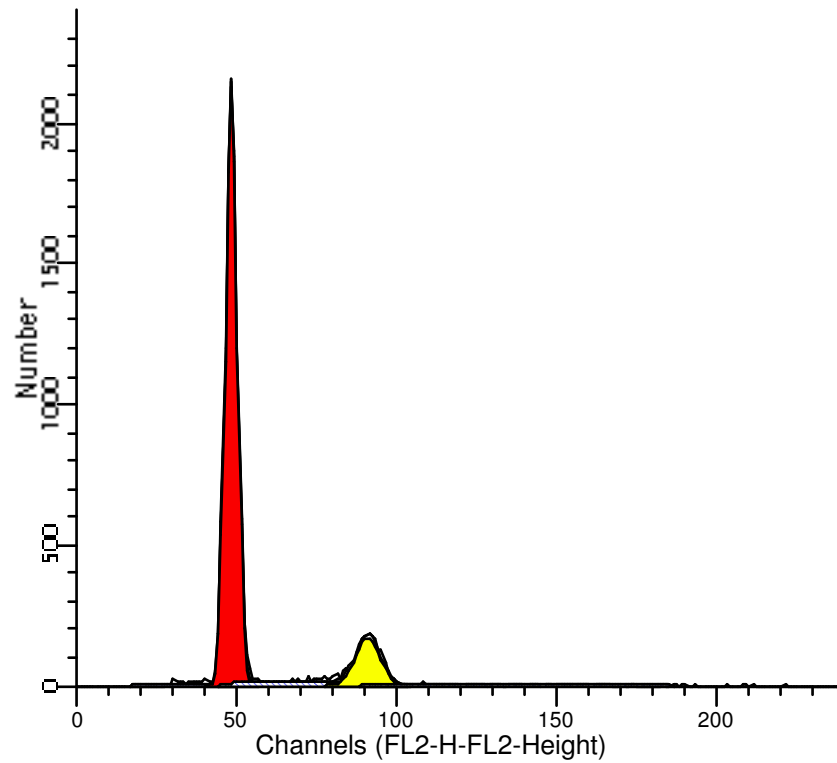


Figure 249: Histogram of 184A1 cells treated with 20μM lycopene for 24 hours.

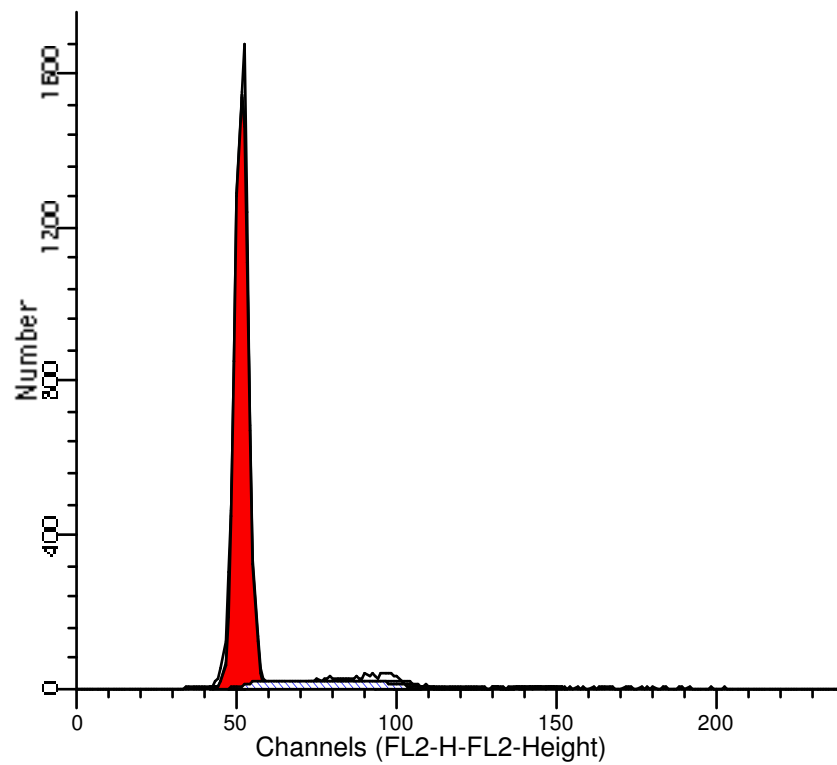


Figure 250: Histogram of 184A1/lycopene control cells treated with THF for 48 hours.

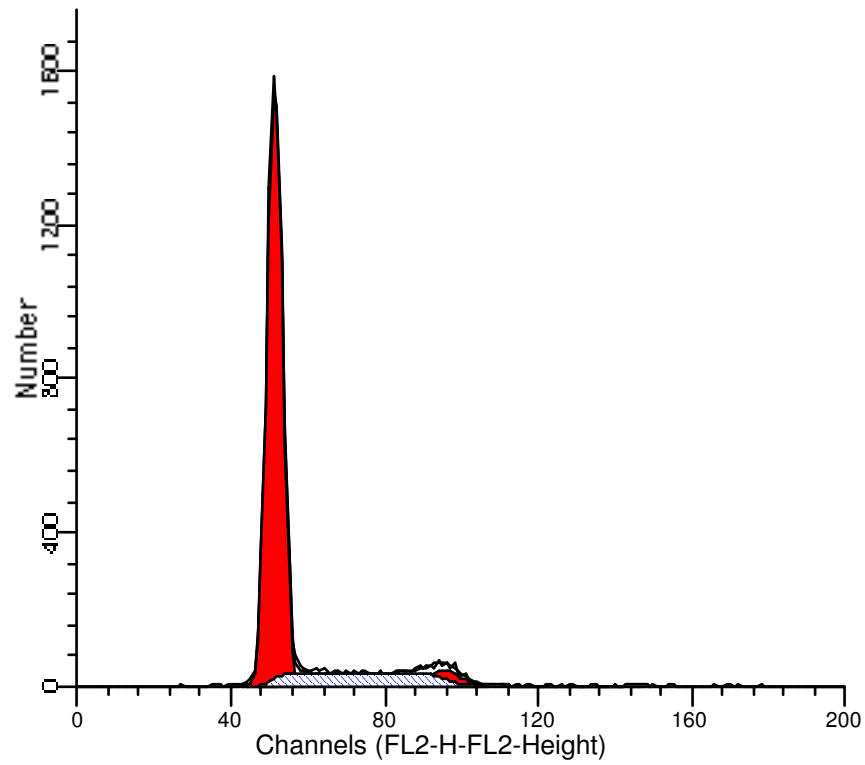


Figure 251: Histogram of 184A1 cells treated with 2 μ M lycopene for 48 hours.

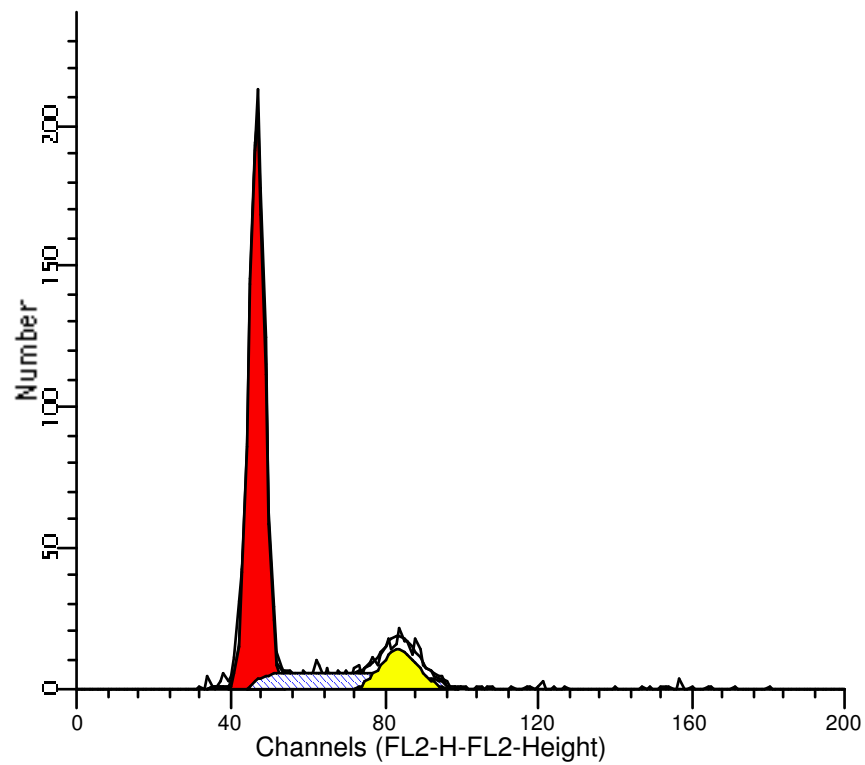


Figure 252: Histogram of 184A1 cells treated with 5 μ M lycopene for 48 hours.

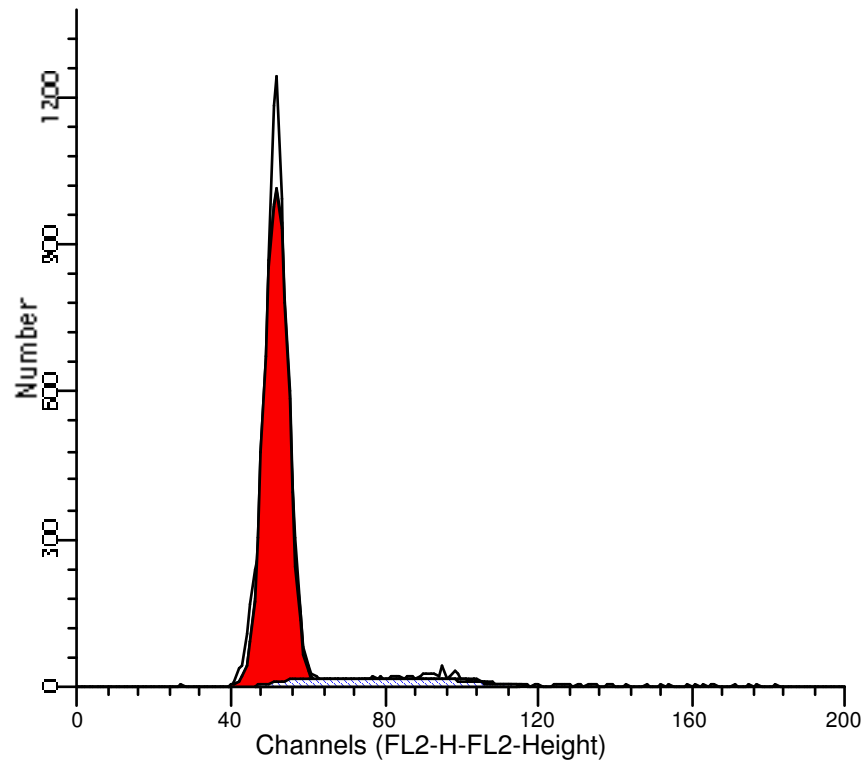


Figure 253: Histogram of 184A1 cells treated with 20μM lycopene for 48 hours.

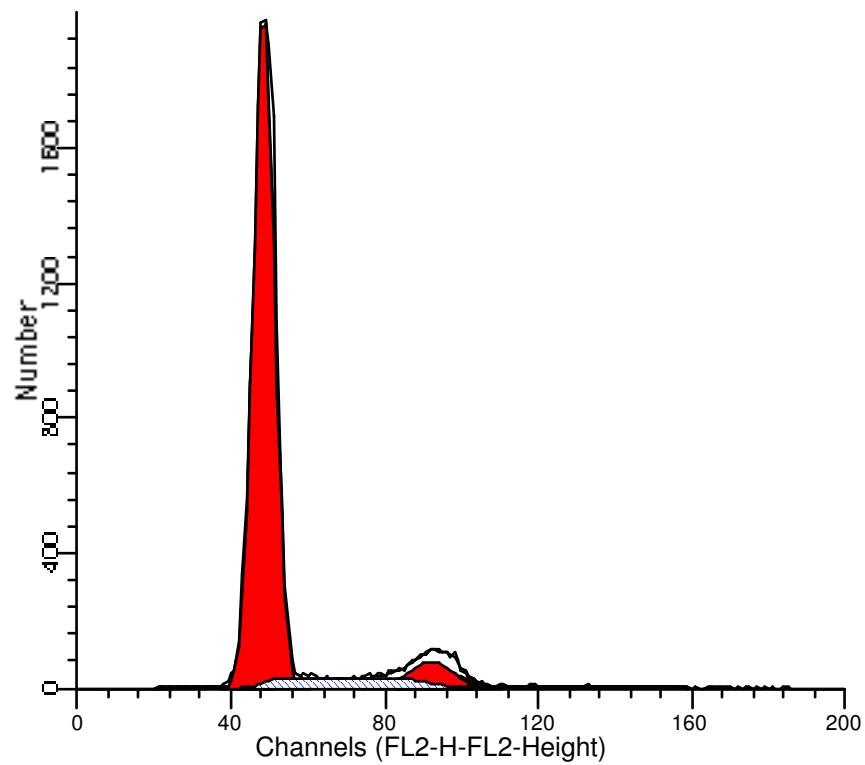


Figure 254: Histogram of 184A1 cells treated with 2μM lycopene for 72 hours.

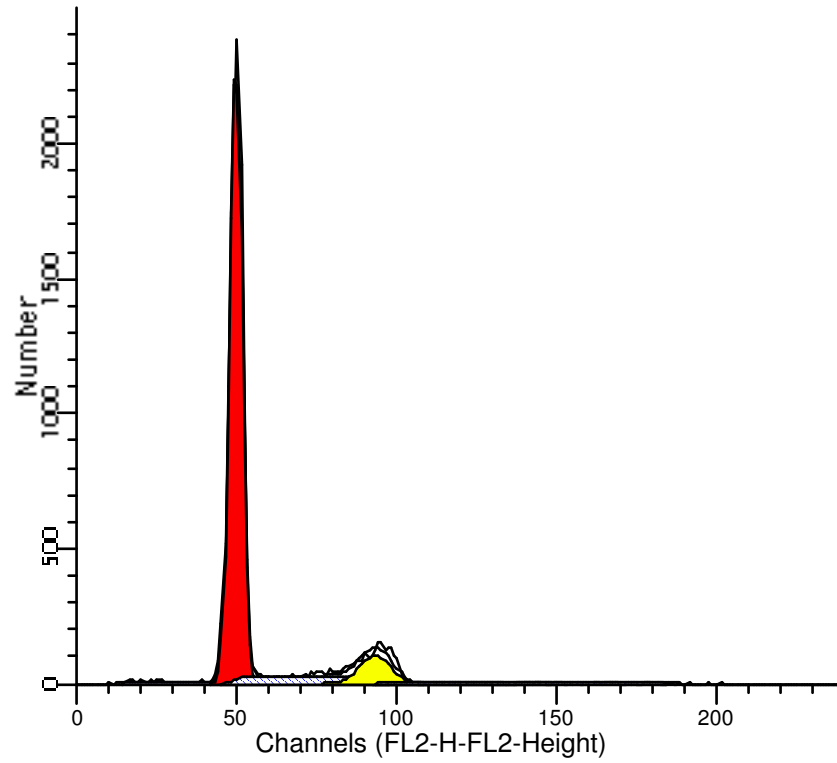


Figure 255: Histogram of 184A1 cells treated with 5µM lycopene for 72 hours.

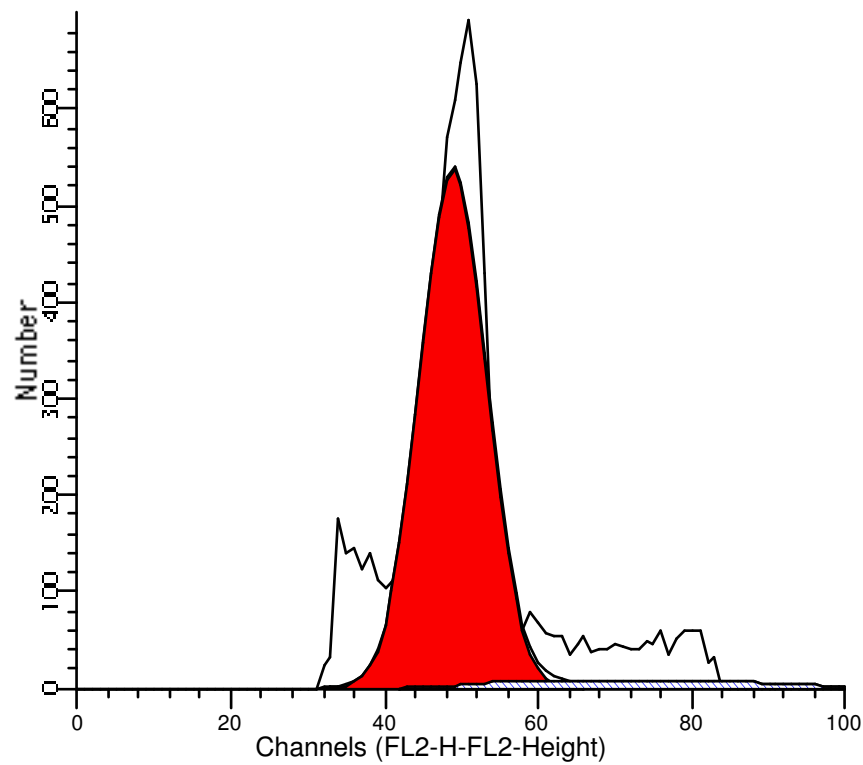


Figure 256: Histogram of 184A1 cells treated with 10µM lycopene for 72 hours.

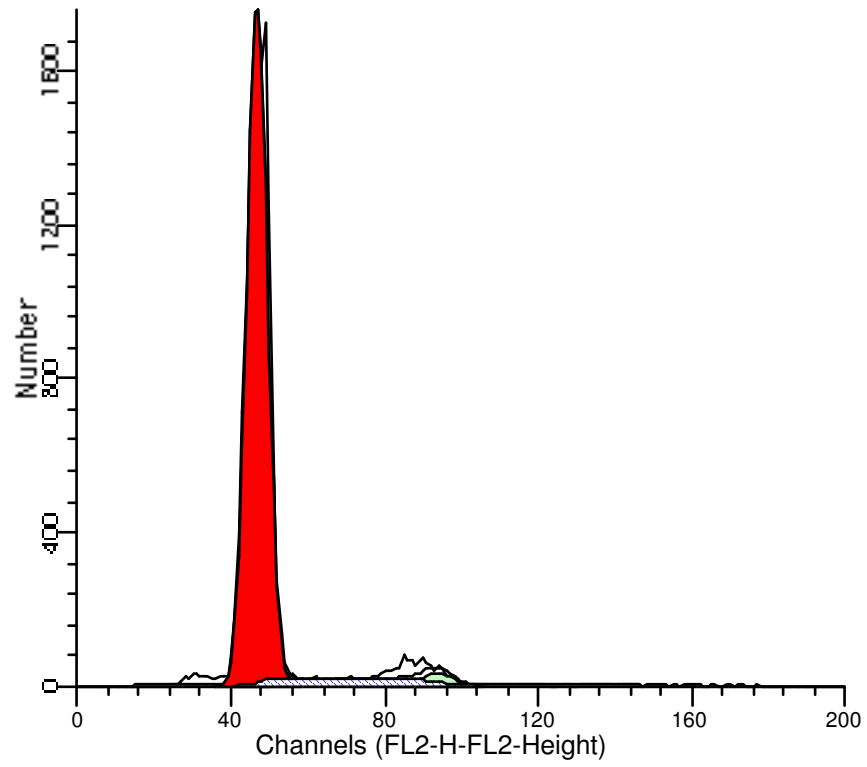


Figure 257: Histogram of 184A1 cells treated with 20 μ M lycopene for 72 hours.

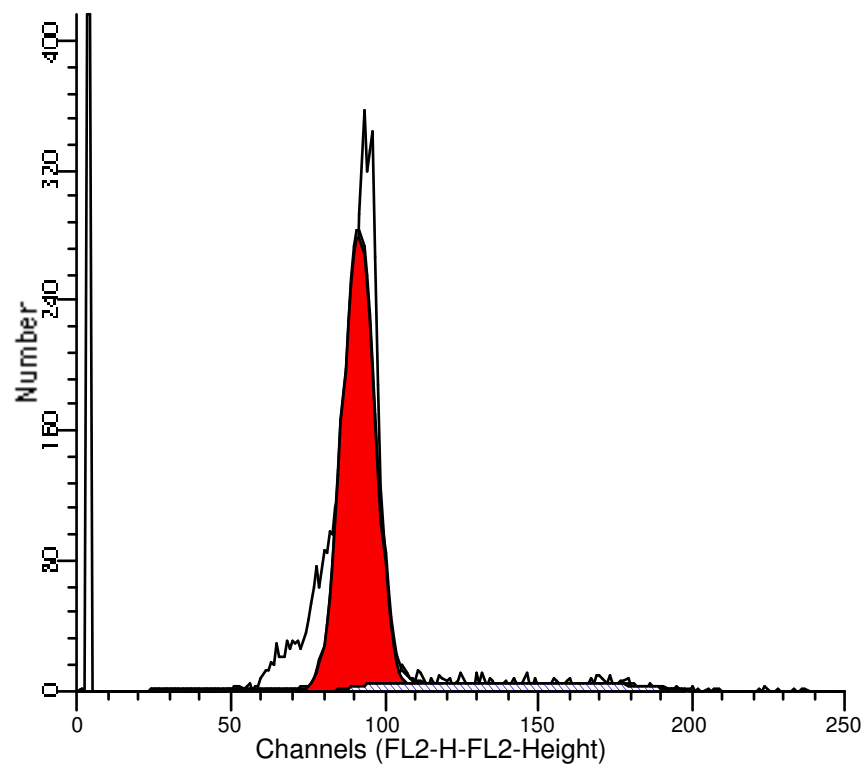


Figure 258: Histogram of 184A1/thalidomide control cells treated with DMSO for 48 hours.

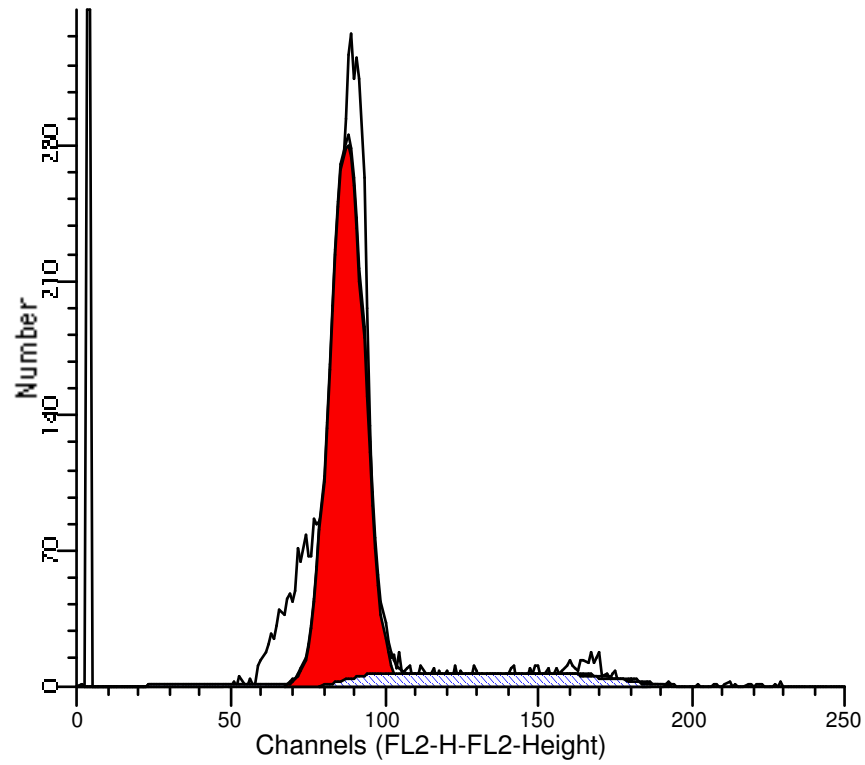


Figure 259: Histogram of 184A1 cells treated with 10µM thalidomide for 48 hours.

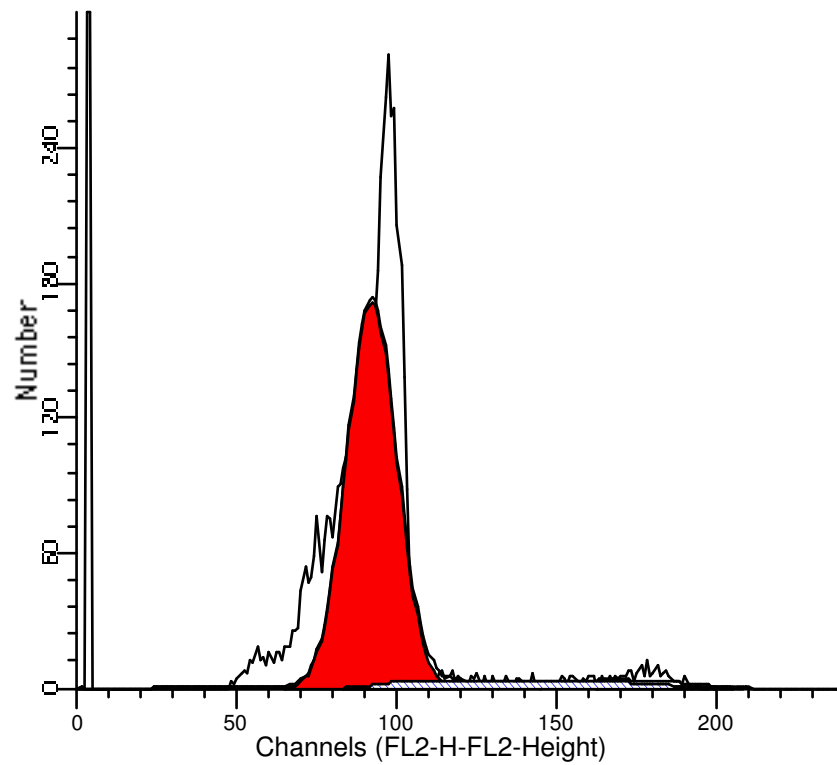


Figure 260: Histogram of 184A1 cells treated with 30µM thalidomide for 48 hours.