

Figure 1.1: Flow cytometry overlay histograms for Caspase-3 expression quantification in B16 F10 cells after 48 hours for (A) control cells treated with PBS, (B) control cells treated with ddH₂O, (C) L-kynurenine treated cells at 1.74 mM, (D) Quinolinic acid treated cells at 8.23 mM, (E) positive control cells treated with nocodazole at 1.30 mM. Unstained control cells treated with PBS (red) was used to set positive gates for the kynurenine exogenous compounds treated cells.

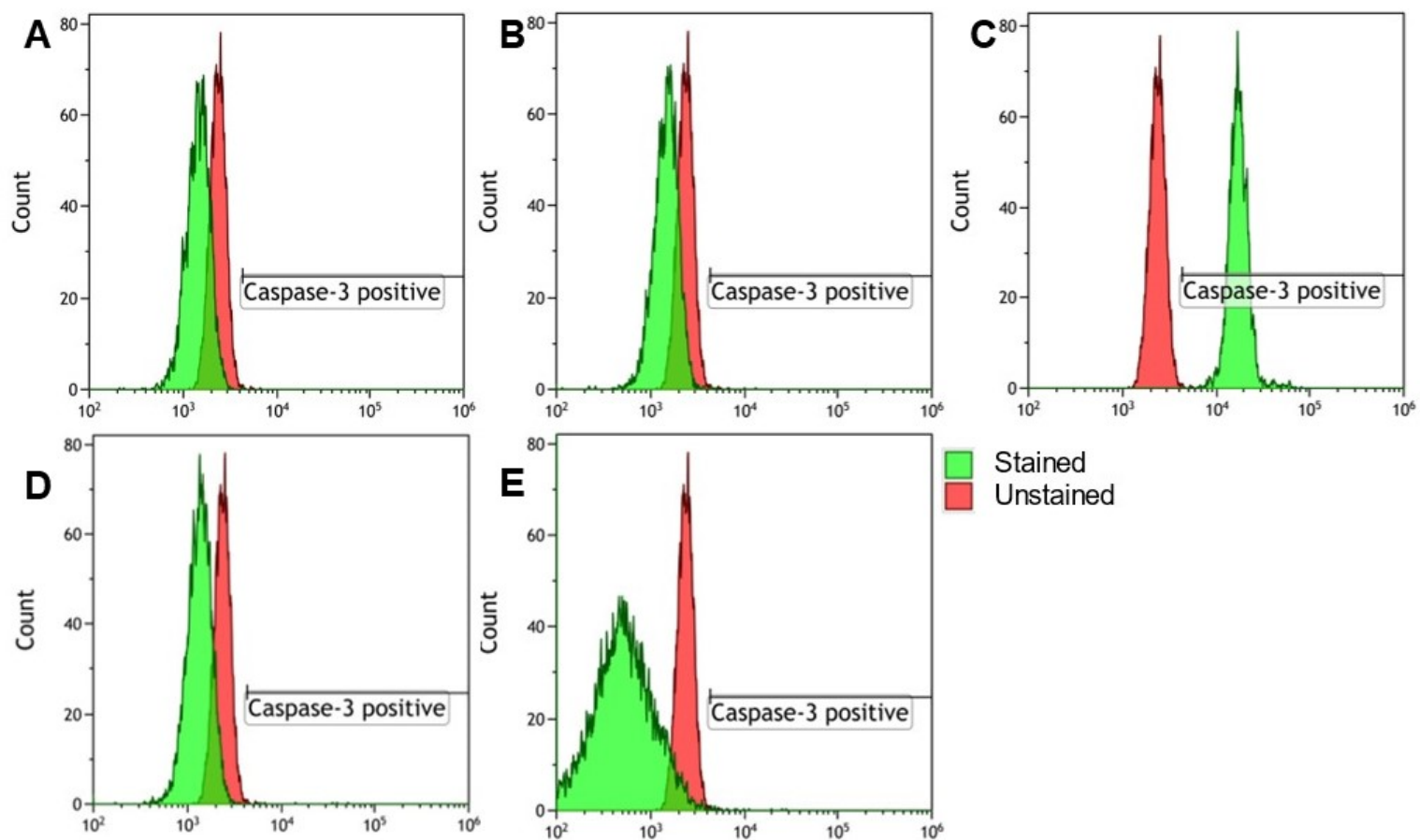


Figure 1.2: Flow cytometry overlay histograms for Caspase-3 expression quantification in RAW 264.7 cells after 48 hours for (A) control cells treated with PBS, (B) control cells treated with ddH₂O, (C) L-kynurenine treated cells at 1.74 mM, (D) Quinolinic acid treated cells at 8.23 mM, (E) positive control cells treated with nocodazole at 1.30 mM. Unstained control cells treated with PBS (red) was used to set positive gates for the kynurenine exogenous compounds treated cells.

Table 1.1: The average of the percentage caspase-3 expression in B16 F10 and RAW 264.7 cells after 48 hours for control cells treated with PBS, control cells treated with ddH₂O, L-kynurenine treated cells at 1.74 Mm, quinolinic acid treated cells at 8.23 Mm and nocodazole at 1.30 mM. The values represent the average of at least 2 experimental repeats for each treatment condition ± SEM.

Cell line	Protein expression	Control (PBS)	Control (ddH ₂ O)	L-kynurenine	Quinolinic acid	Nocodazole
B16 F10	Caspase-3	6.35 ± 0.84	9.37 ± 1.75	99.99 ± 0.01	1.95 ± 0.15	2.59 ± 0.81
RAW 264.7		0.03 ± 0.01	0.09 ± 0.04	99.89 ± 0.11	0.14 ± 0.02	0.15 ± 0.06

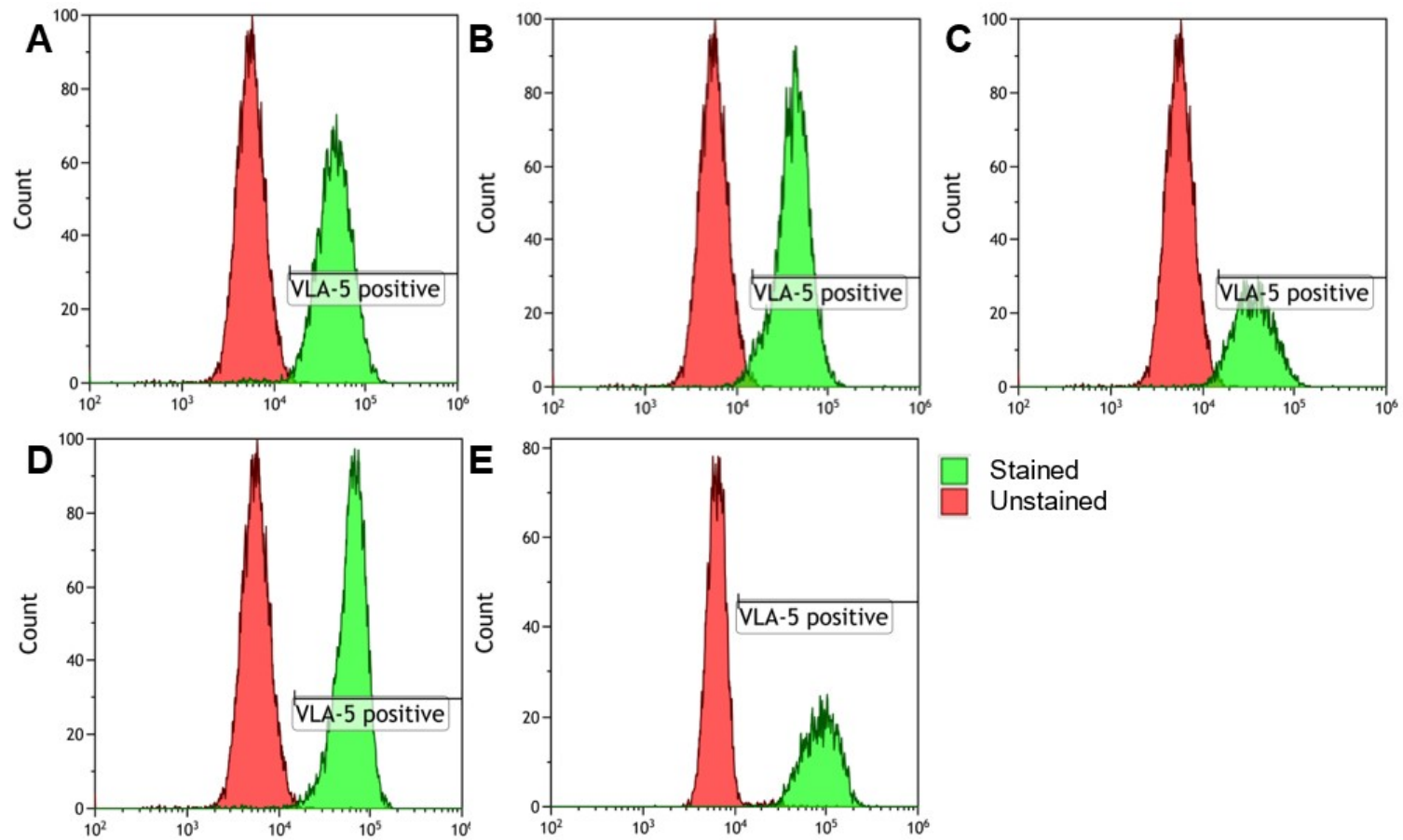


Figure 1.3: Flow cytometry overlay histograms for VLA-5 expression quantification in B16 F10 cells after 48 hours for (A) control cells treated with PBS, (B) control cells treated with ddH₂O, (C) L-kynurenine treated cells at 1.74 mM, (D) Quinolinic acid treated cells at 8.23 mM, (E) positive control cells treated with nocodazole at 1.30 mM. Unstained control cells treated with PBS (red) was used to set positive gates for the kynurenine exogenous compounds treated cells.

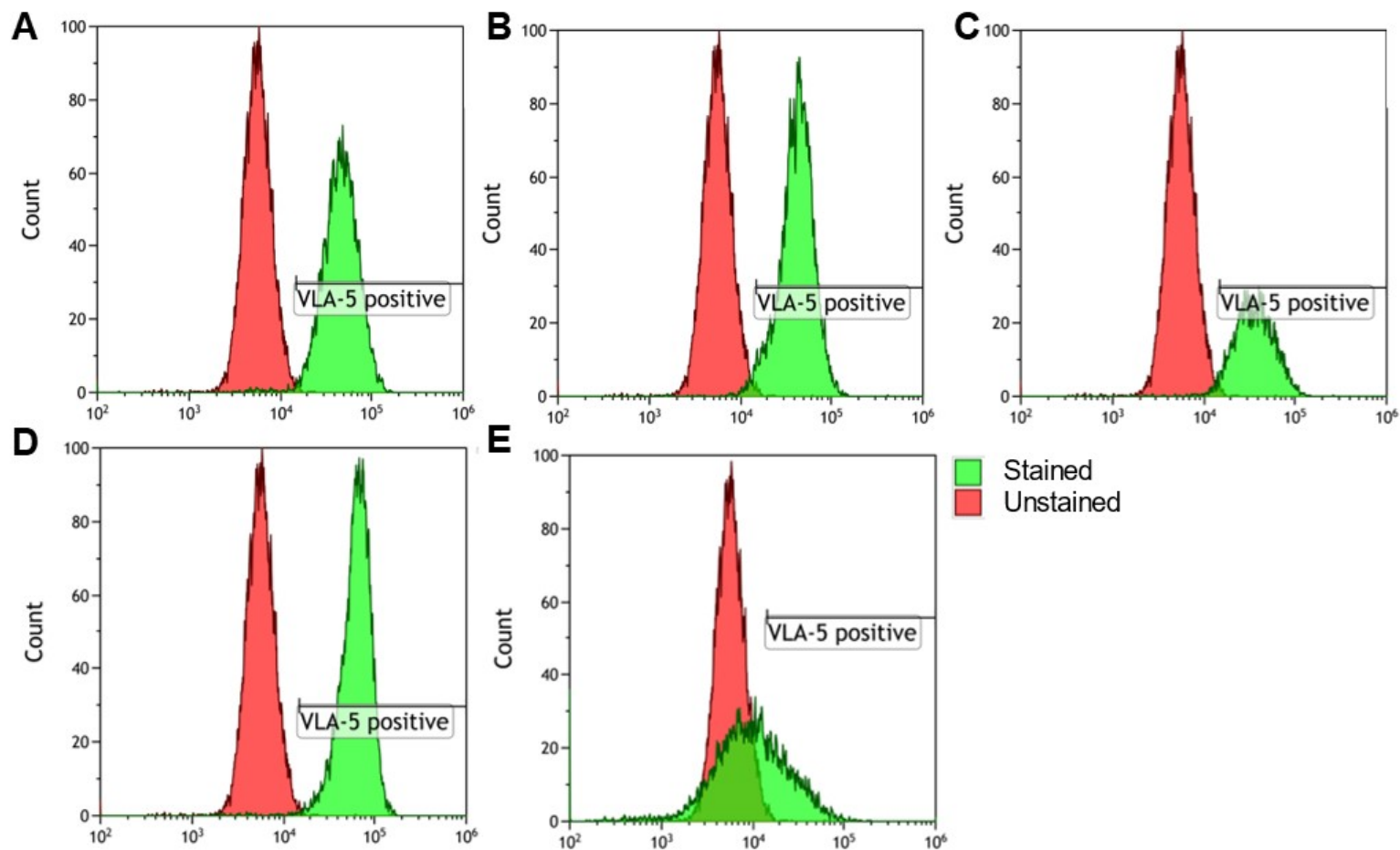


Figure 1.4: Flow cytometry overlay histograms for VLA-5 expression quantification in RAW 264.7 cells after 48 hours for (A) control cells treated with PBS, (B) control cells treated with ddH₂O, (C) L-kynurenine treated cells at 1.74 mM, (D) Quinolinic acid treated cells at 8.23 mM, (E) positive control cells treated with nocodazole at 1.30 mM. Unstained control cells treated with PBS (red) was used to set positive gates for the kynurenine exogenous compounds treated cells.

Table 1.2: The average of the percentage VLA-5 expression in B16 F10 and RAW 264.7 cells after 48 hours for control cells treated with PBS, control cells treated with ddH₂O, L-kynurenine treated cells at 1.74 Mm, quinolinic acid treated cells at 8.23 Mm and nocodazole at 1.30 mM. The values represent the average of at least 2 experimental repeats for each treatment condition ± SEM.

Cell line	Protein expression	Control (PBS)	Control (ddH₂O)	L-kynurenine	Quinolinic acid	Nocodazole
B16 F10	VLA-5	100.00 ± 0.00	100.00 ± 0.01	100.00 ± 0.00	99.99 ± 0.01	99.87 ± 0.05
RAW 264.7		98.97 ± 0.13	99.04 ± 0.48	93.10 ± 1.80	99.43 ± 0.05	86.22 ± 4.51

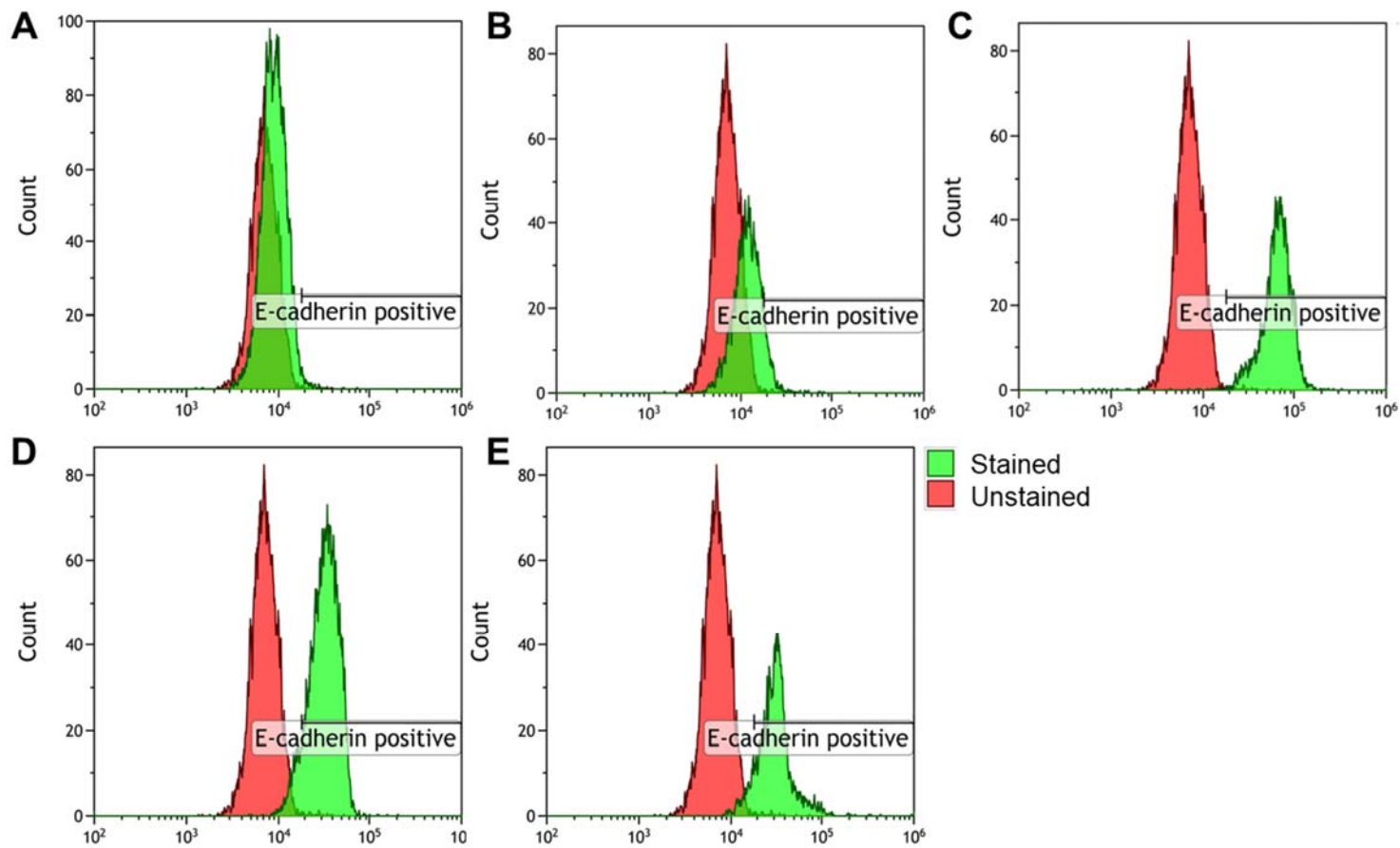


Figure 1.5: Flow cytometry overlay histograms for E-cadherin expression quantification in B16 F10 cells after 48 hours for (A) control cells treated with PBS, (B) control cells treated with ddH₂O, (C) L-kynurenine treated cells at 1.74 mM, (D) Quinolinic acid treated cells at 8.23 mM, (E) positive control cells treated with nocodazole at 1.30 mM. Unstained control cells treated with PBS (red) were used to set positive gates for the kynurenine exogenous compounds treated cells.

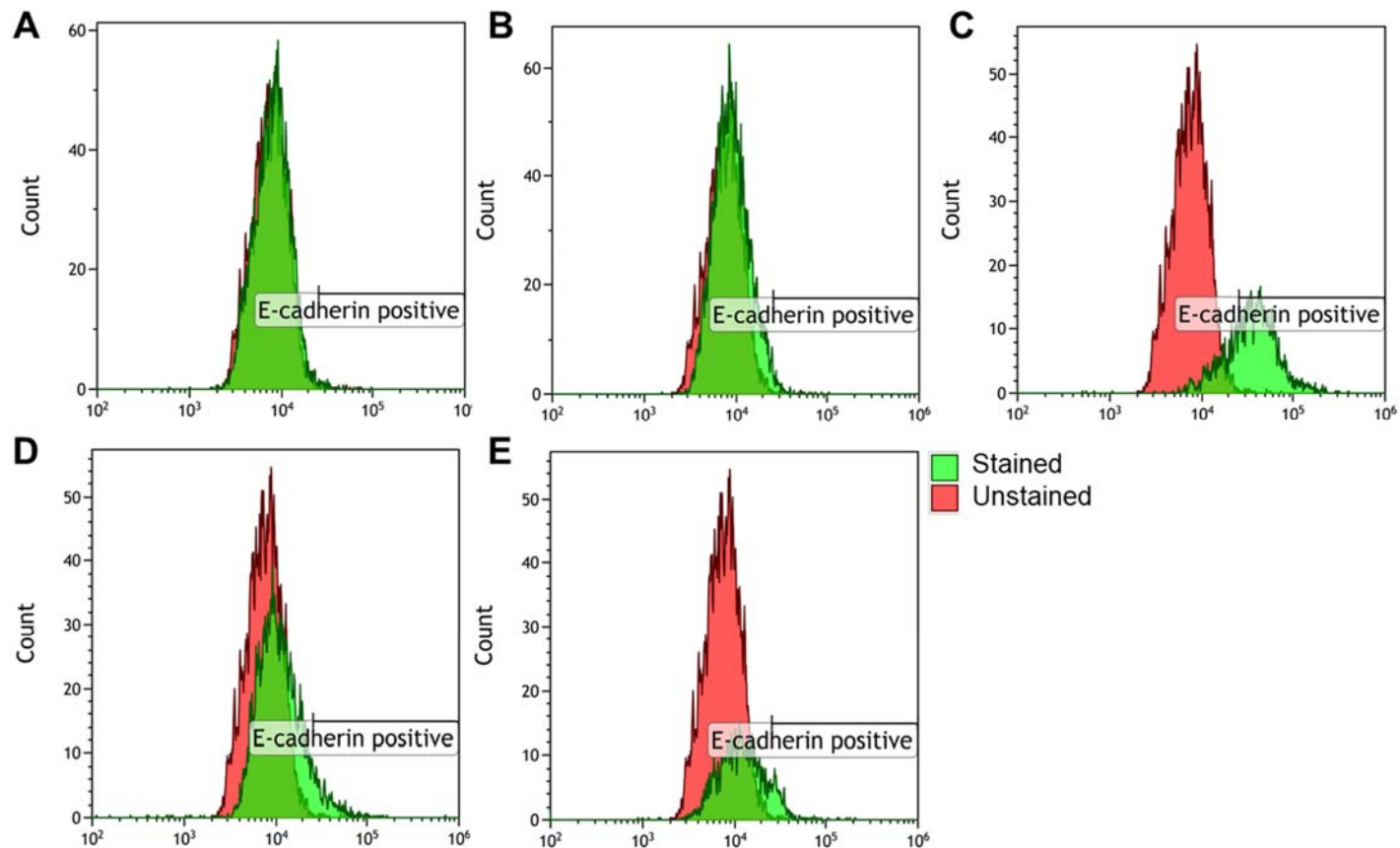


Figure 1.6: Flow cytometry overlay histograms for E-cadherin expression quantification in RAW 264.7 cells after 48 hours for (A) control cells treated with PBS, (B) control cells treated with ddH₂O, (C) L-kynurenine treated cells at 1.74 mM, (D) Quinolinic acid treated cells at 8.23 mM, (E) positive control cells treated with nocodazole at 1.30 mM. Unstained control cells treated with PBS (red) were used to set positive gates for the kynurenine exogenous compounds treated cells.

Table 1.3: The average of the percentage E-cadherin expression in B16 F10 and RAW 264.7 cells after 48 hours for control cells treated with PBS, control cells treated with ddH₂O, L-kynurenine treated cells at 1.74 Mm, quinolinic acid treated cells at 8.23 Mm and nocodazole at 1.30 mM. The values represent the average of at least 2 experimental repeats for each treatment condition ± SEM.

Cell line	Protein expression	Control (PBS)	Control (ddH ₂ O)	L-kynurenine	Quinolinic acid	Nocodazole
B16 F10	E-cadherin	4.02 ± 1.64	26.30 ± 7.06	99.57 ± 0.17	95.79 ± 1.07	92.51 ± 1.02
RAW 264.7		1.67 ± 1.01	4.04 ± 2.82	77.26 ± 5.88	12.84 ± 5.25	17.93 ± 5.97

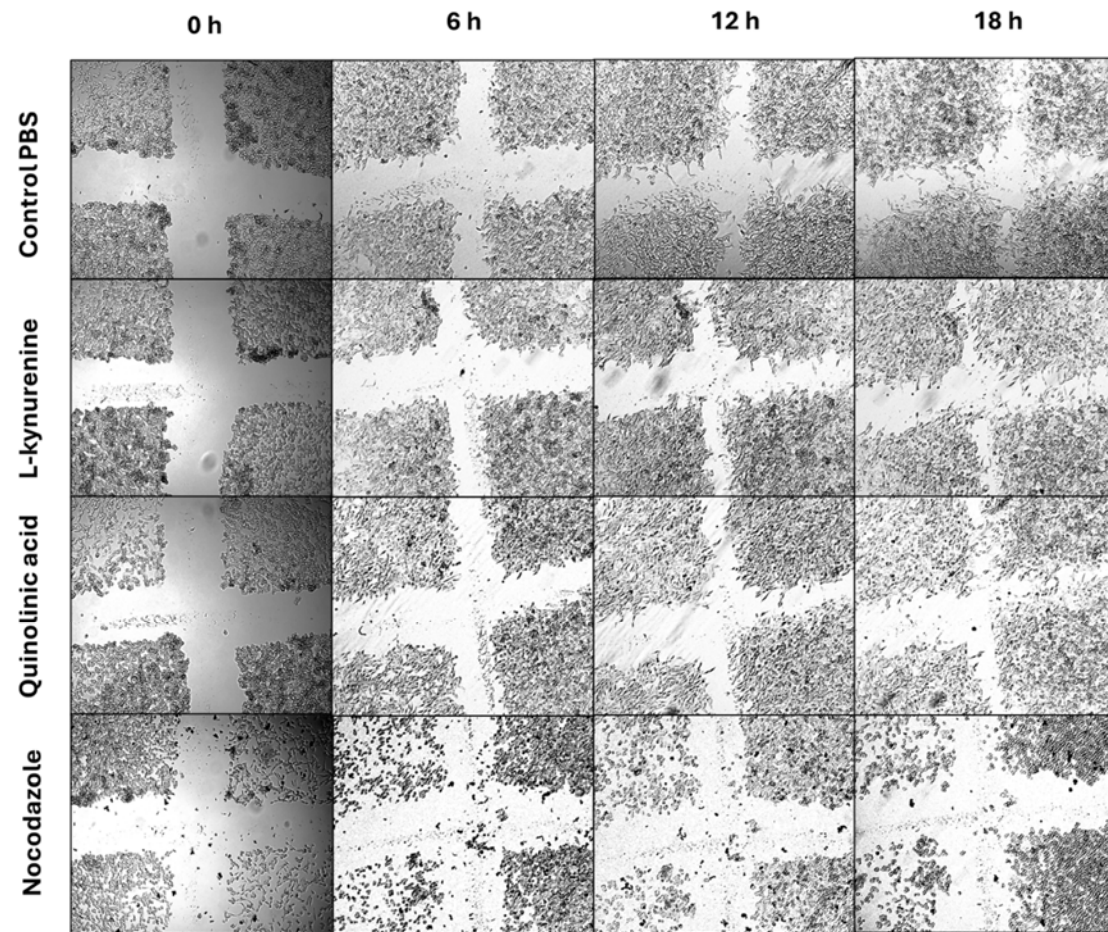


Figure 1.7: Scratch migration images in B16 F10 cells after 0, 6, 12, and 18 hours for control cells treated with PBS, L-kynurenine-treated cells at 0.17 mM, quinolinic acid-treated cells at 0.82 mM and positive control cells treated with nocodazole at 0.13 mM.