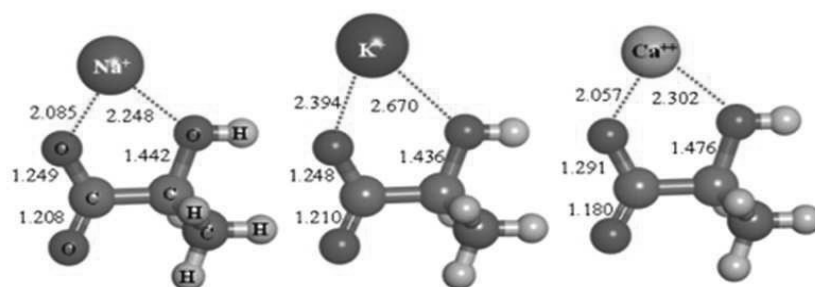


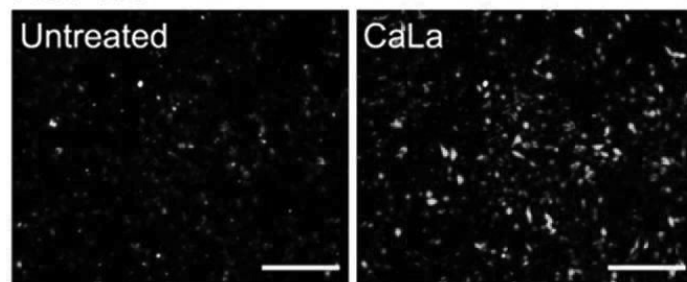
FIG. 1

**Table 1.** Binding free energy of Metal-Lactate complexes

	Metal (Hartree)	Lactate (Hartree)	Binding Energy (ΔE , kcal/mol)	TAS (kcal/mol)	ΔG (kcal/mol)
Na⁺-Lactate	-161.664286	-341.163438	-126.21	-8.03	-118.18
K⁺-Lactate	-599.001916	-341.163438	-106.85	-7.06	-99.79
Ca²⁺-Lactate	-676.13655	-341.163438	-290.86	-8.20	-282.66

FIG. 2

HCT-116



HT-29

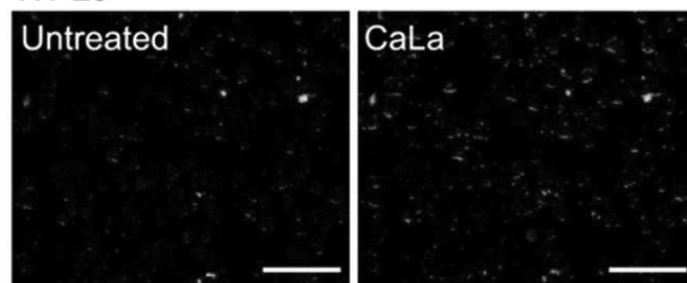


FIG. 3

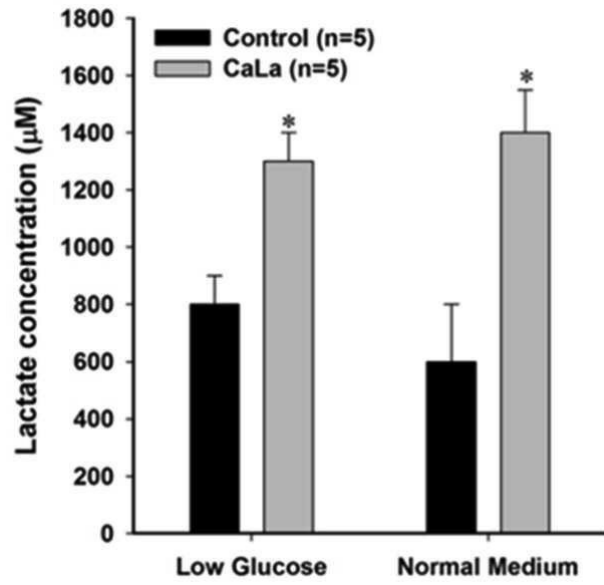


FIG. 4

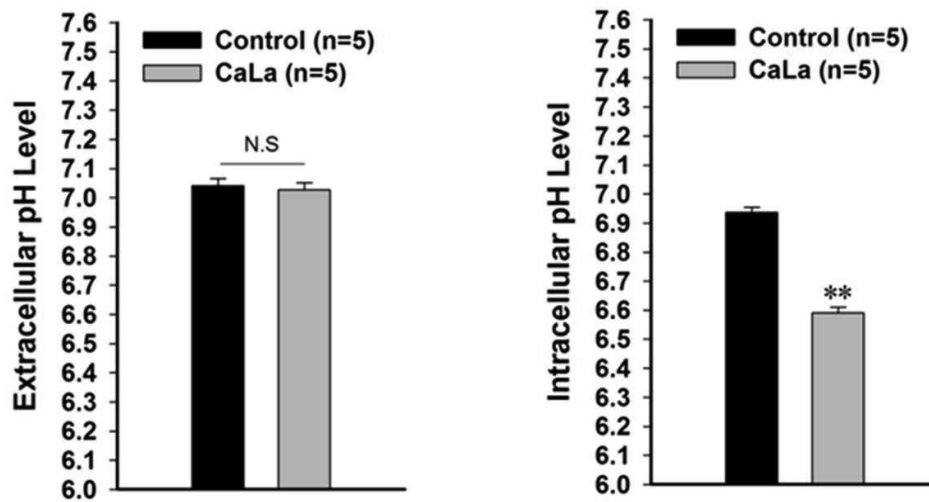


FIG. 5

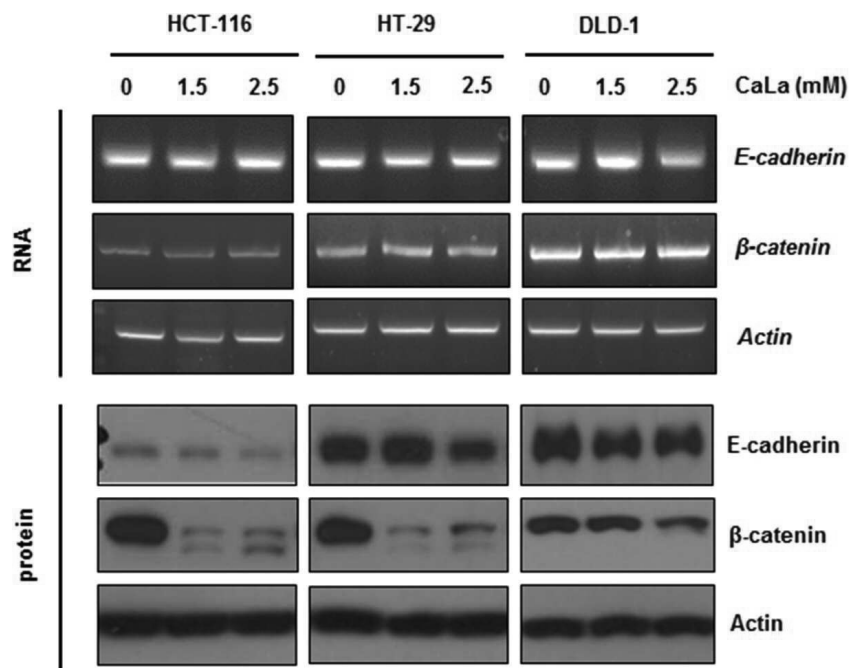


FIG. 6

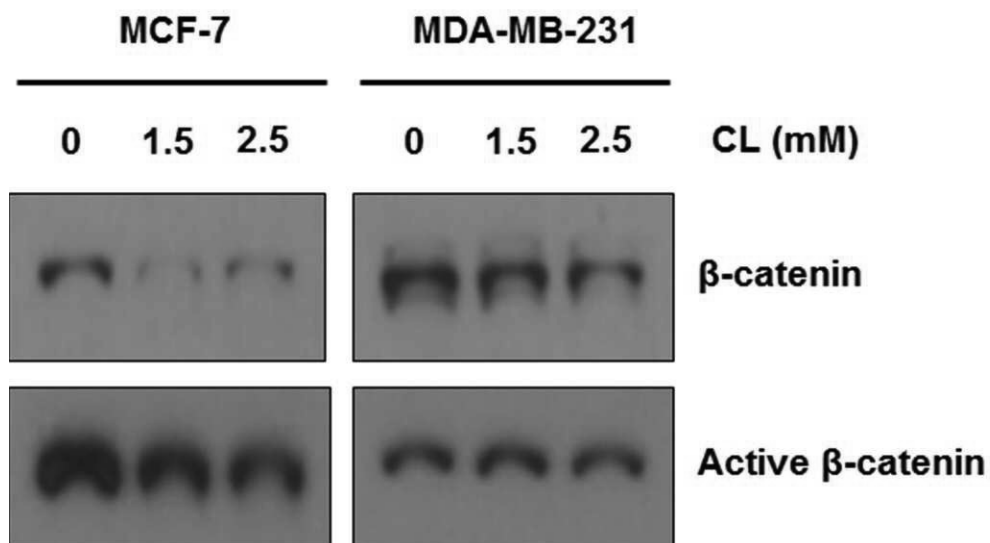


FIG. 7

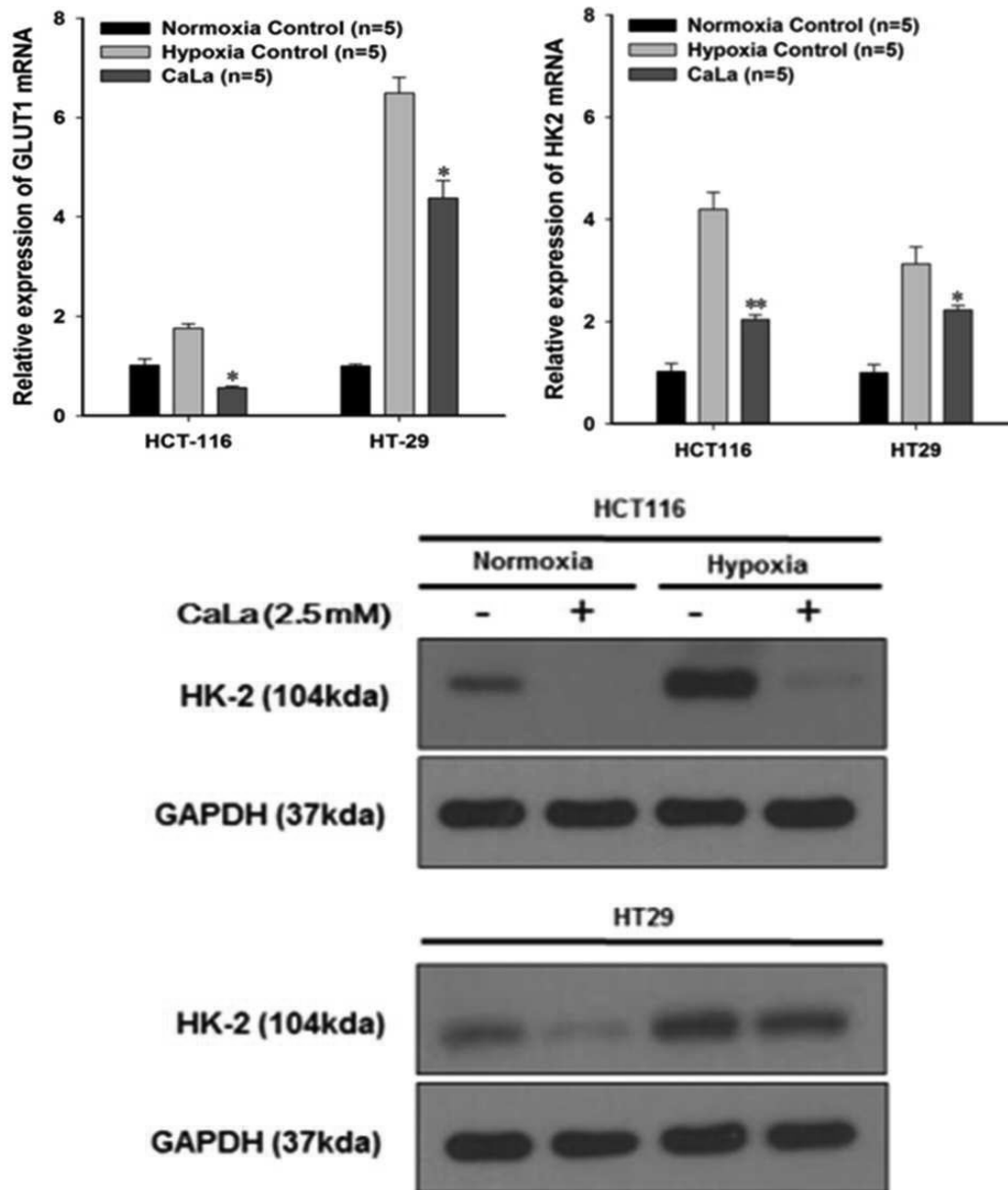


FIG. 8

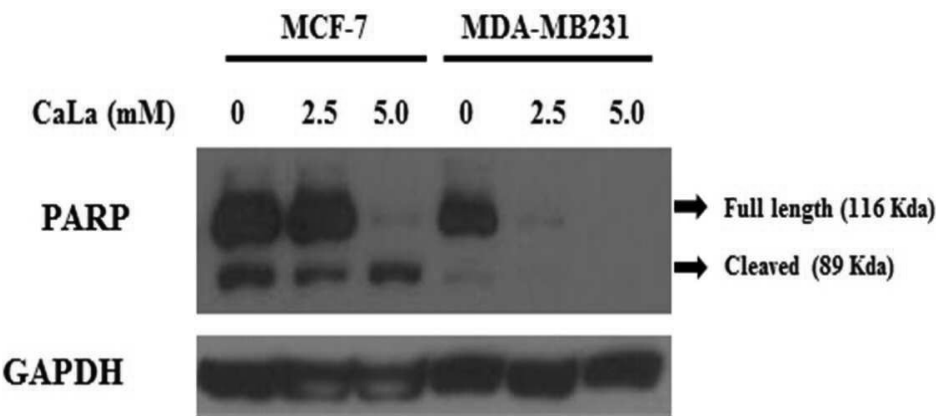


FIG. 9

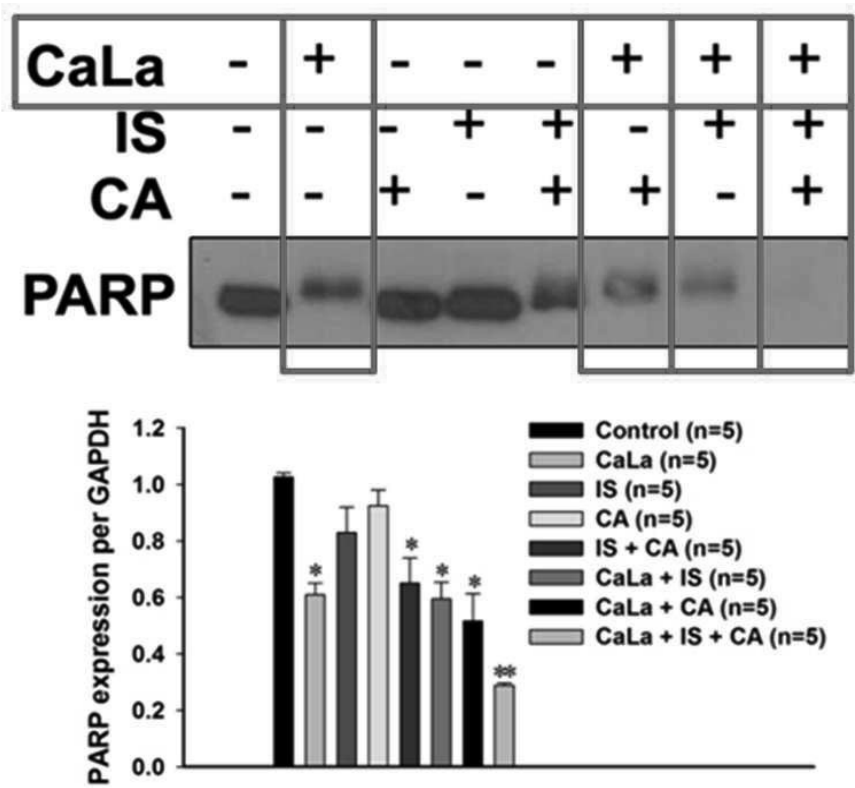


FIG. 10

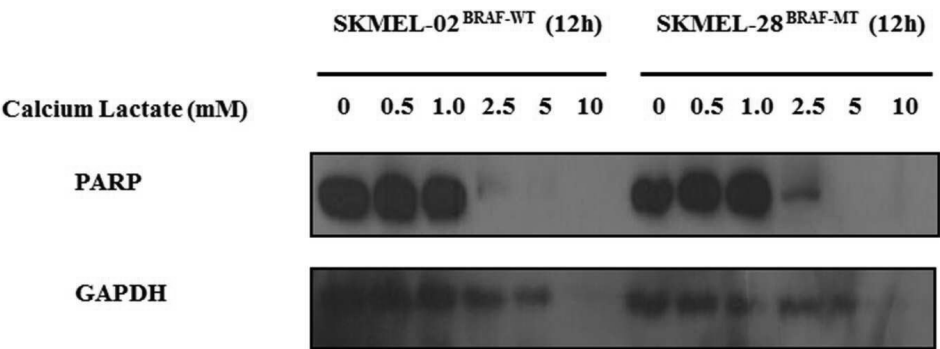


FIG. 11a

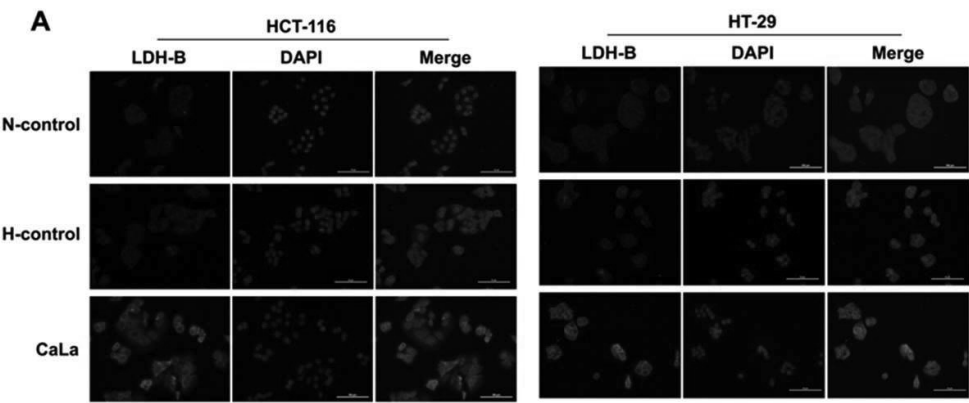


FIG. 11b

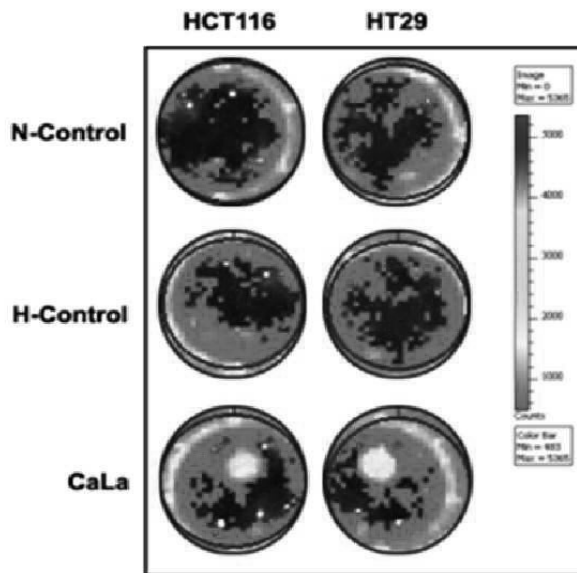


FIG. 11c

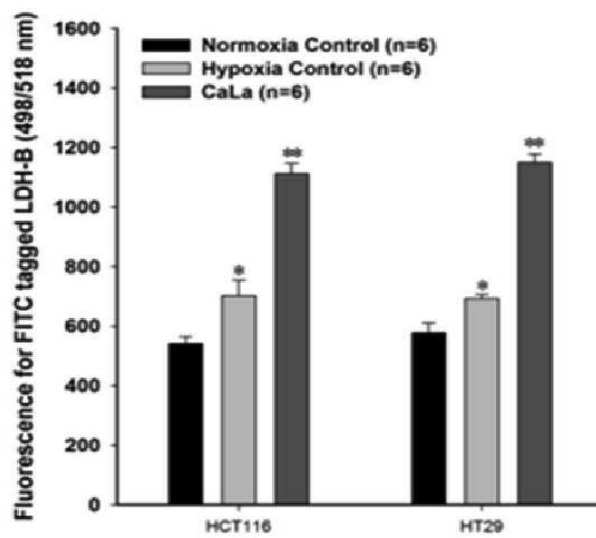


FIG. 12

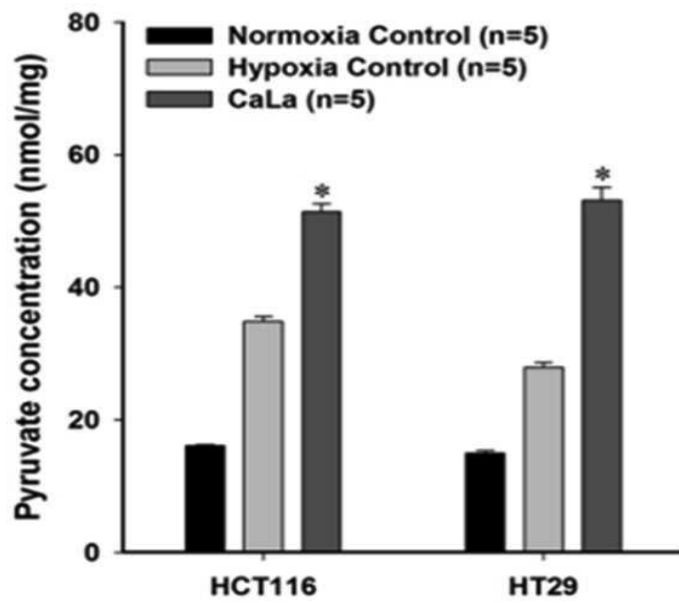


FIG. 13a

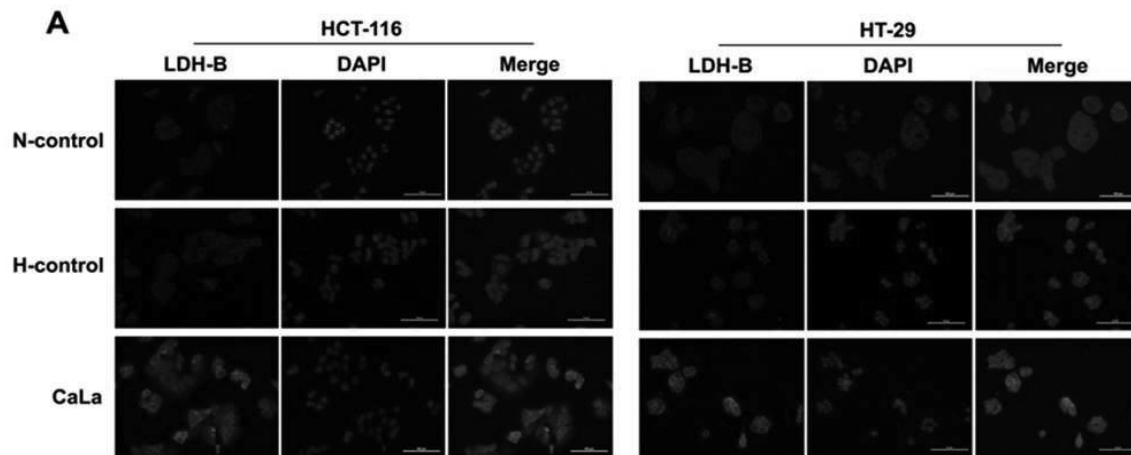


FIG. 13b

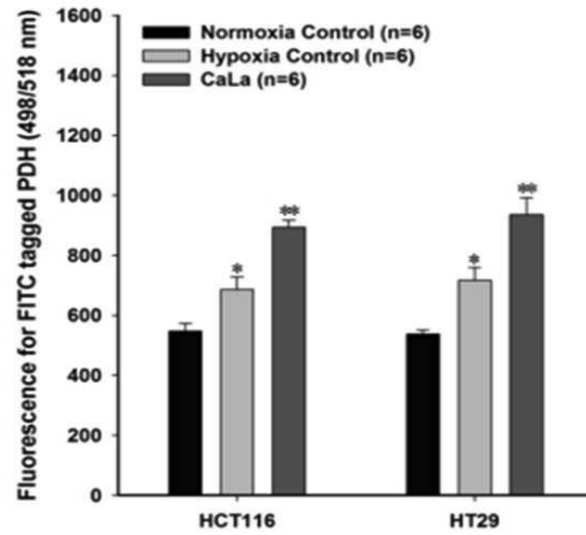


FIG. 14a

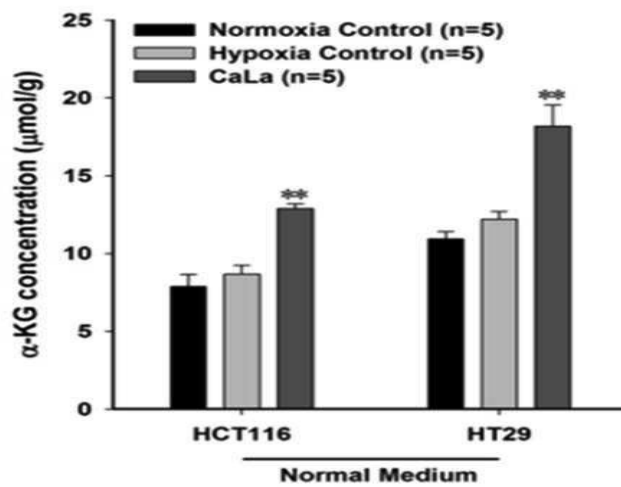


FIG. 14b

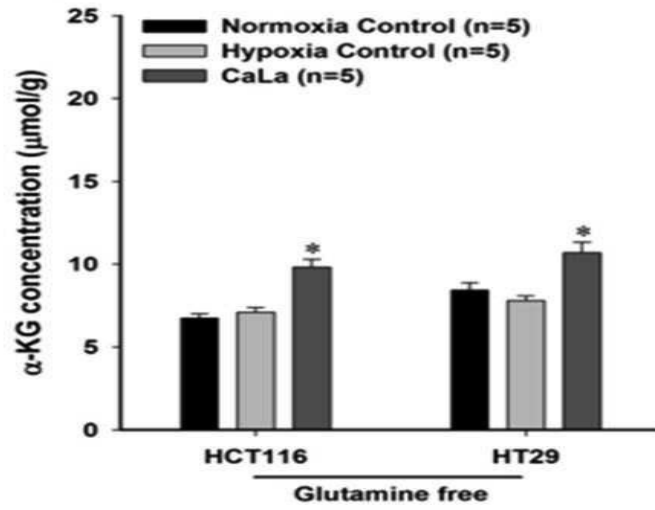


FIG. 15

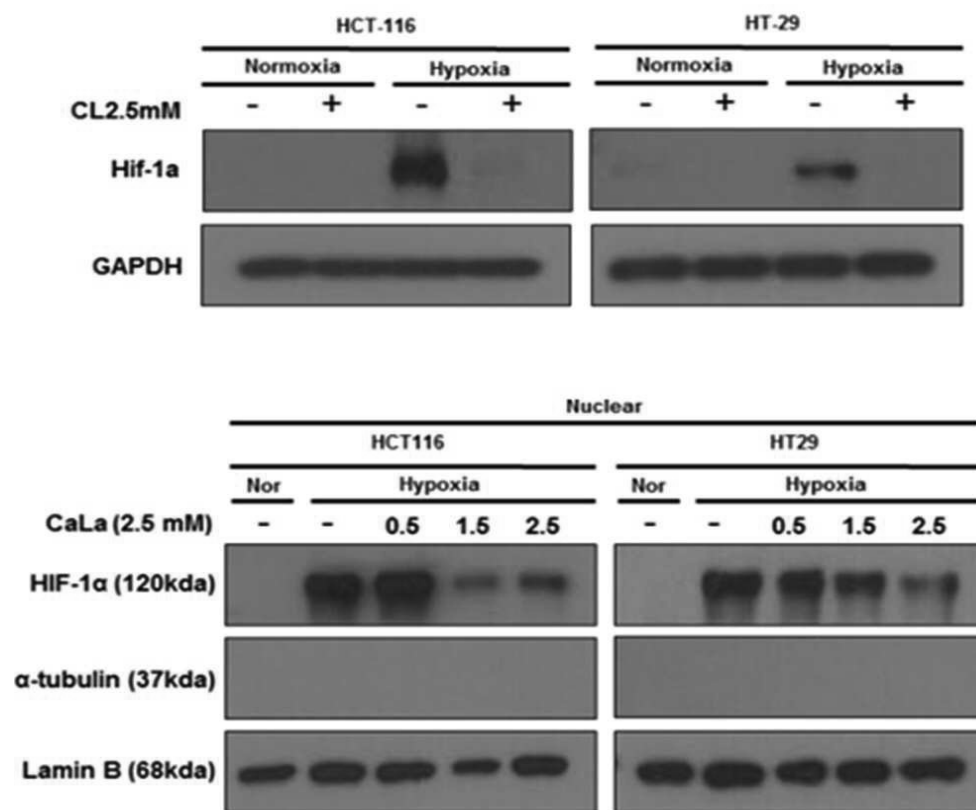


FIG. 16a

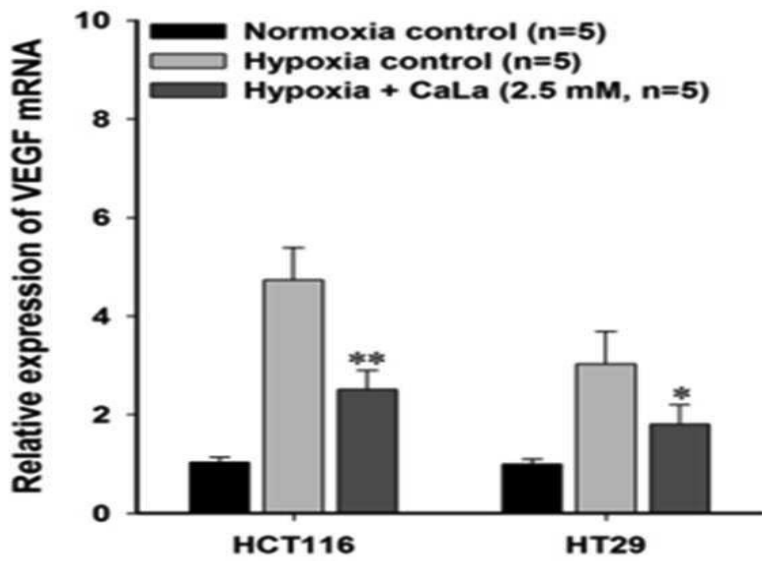


FIG. 16b

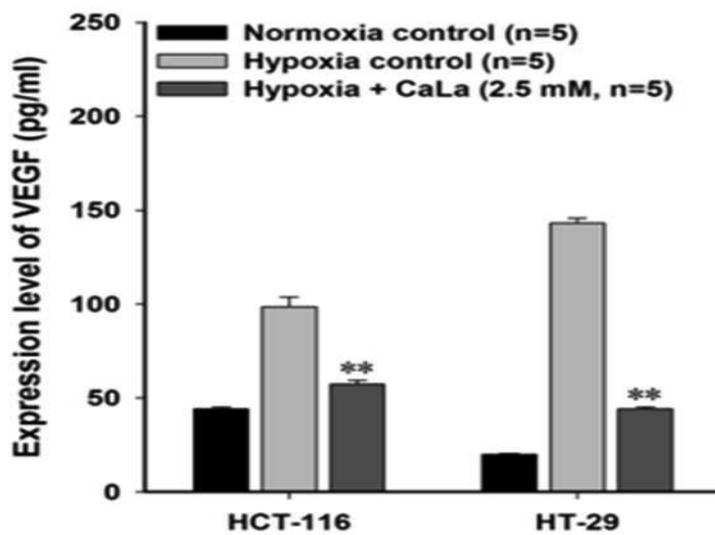


FIG. 17

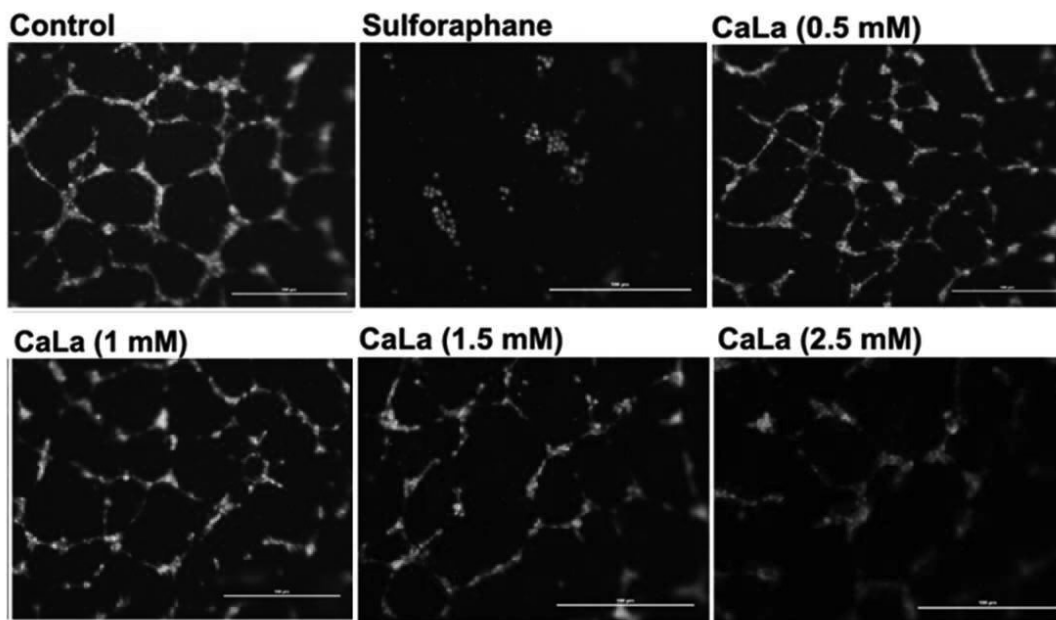


FIG. 18

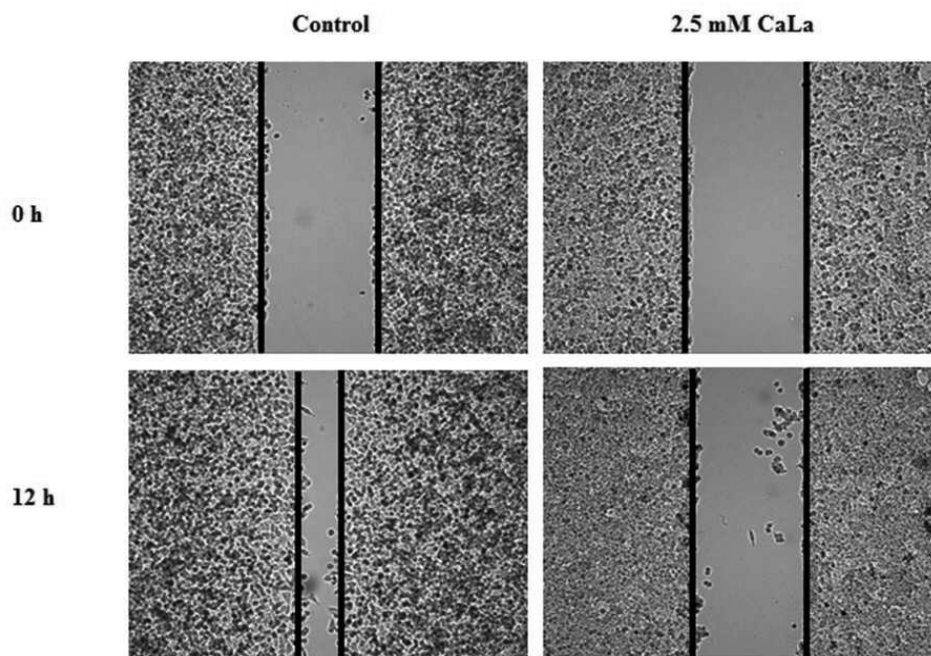


FIG. 19

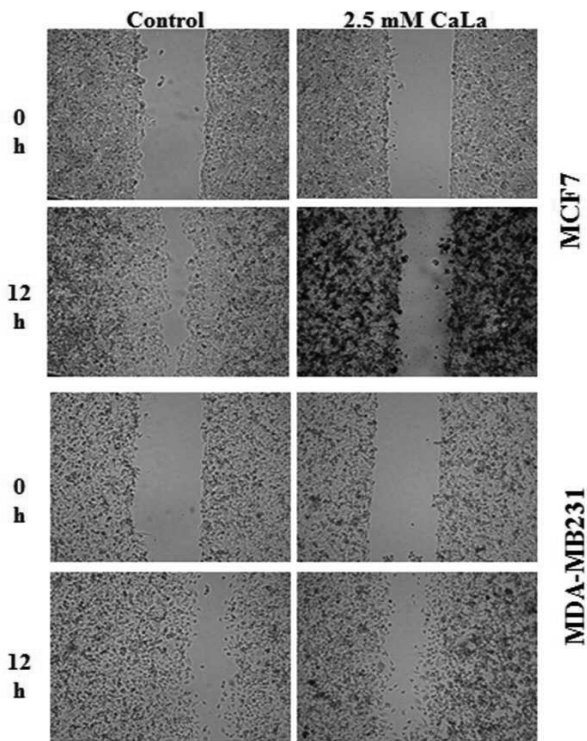


FIG. 20

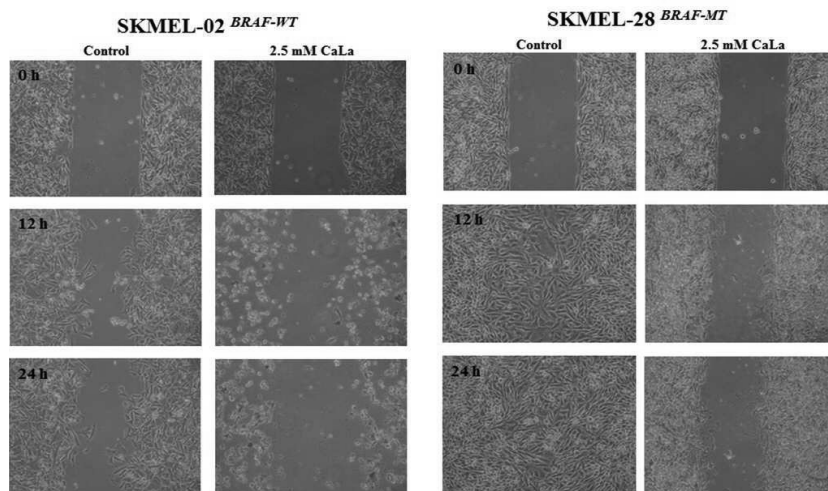


FIG. 21a

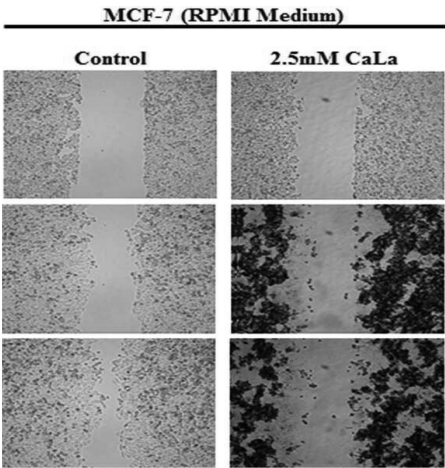


FIG. 21b

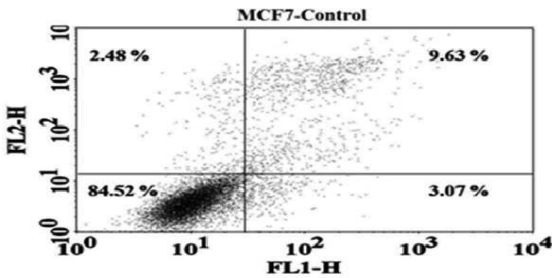


FIG. 21c

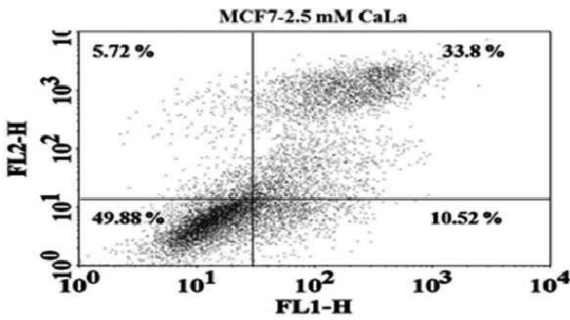


FIG. 21d

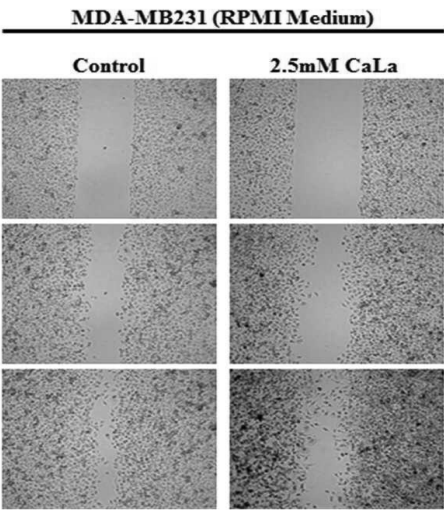


FIG. 21e

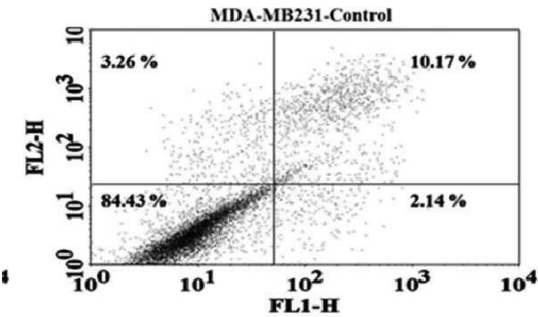


FIG. 21f

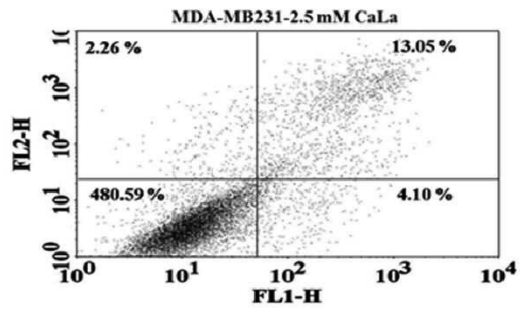


FIG. 22

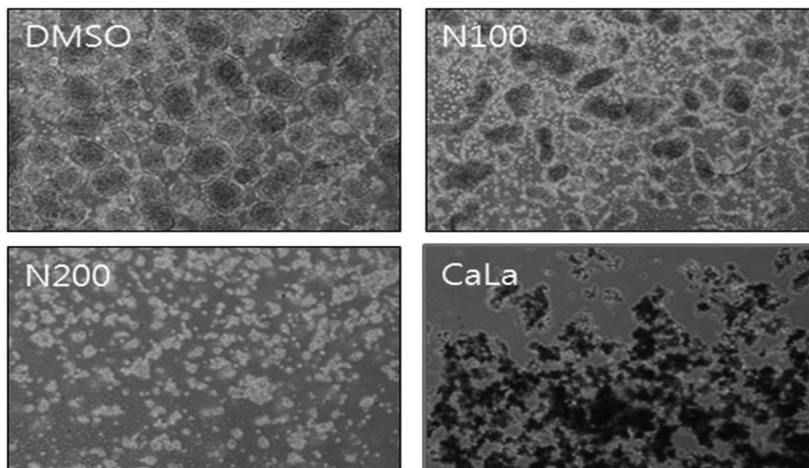


FIG. 23

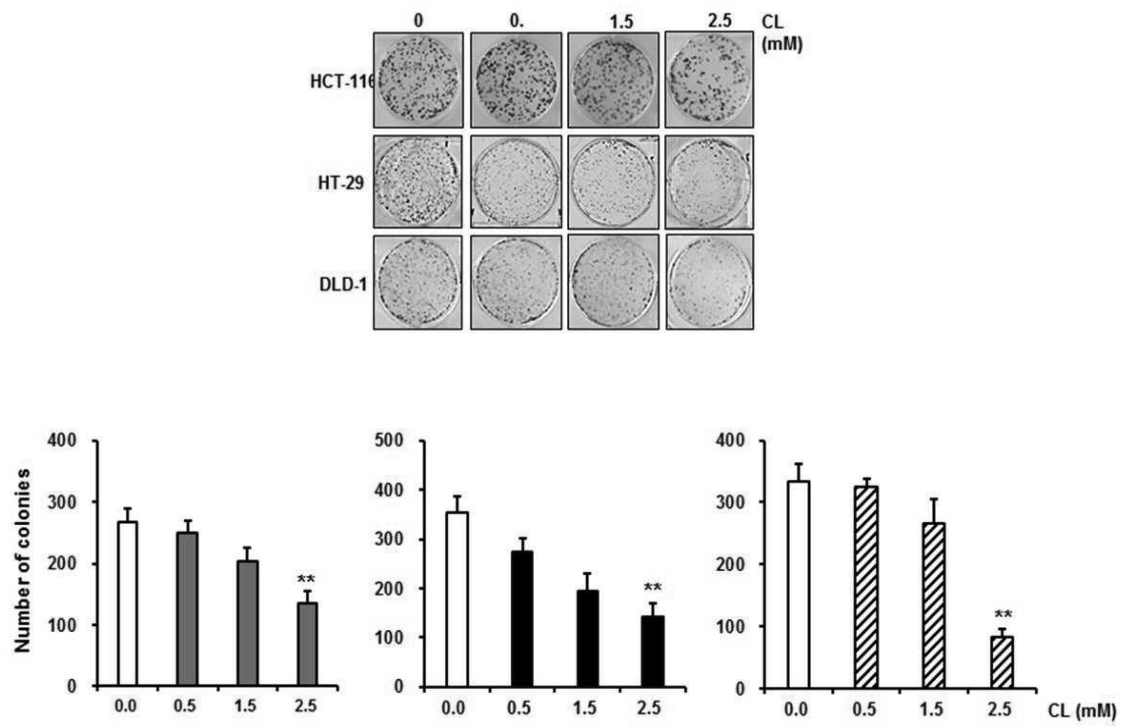
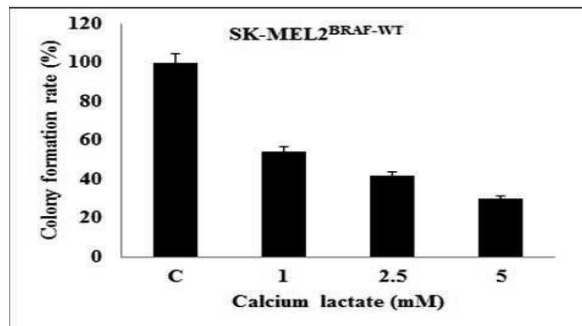
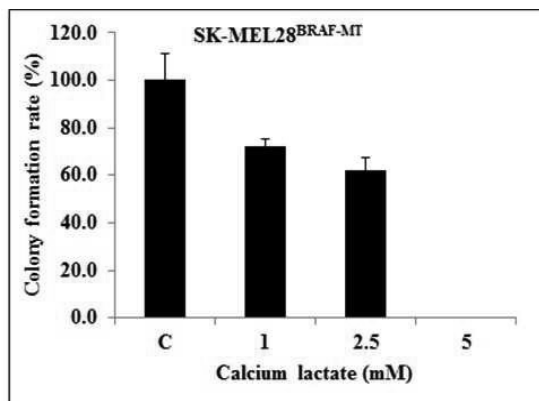


FIG. 24a



SK-MEL2 ^{BRAF-WT}	Average	CfR %	SD
Control	167	100	18.52
CaLa 1 mM	90.7	53.8922	20.11
CaLa 2.5 mM	69.7	41.3174	8.5
CaLa 5 mM	49.7	29.3413	11.72

FIG. 24b



SK-MEL28 ^{BRAF-MT}	Average	CfR %	SD
Control	105.3	100.3	10.97
CaLa 1 mM	75.7	72.1	3.51
CaLa 2.5 mM	65.3	62.2	5.51
CaLa 5 mM	0.0	0.0	0.00

FIG. 25a

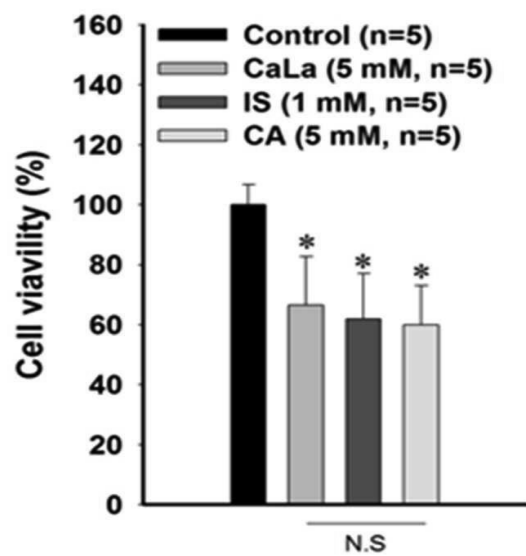


FIG. 25b

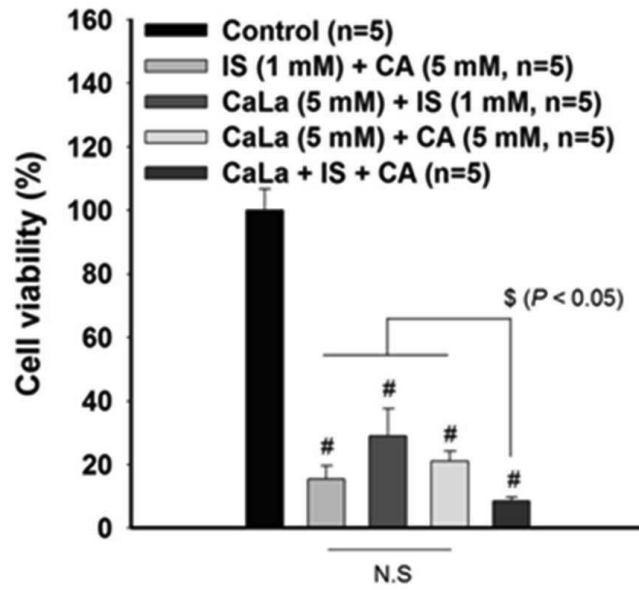


FIG. 26

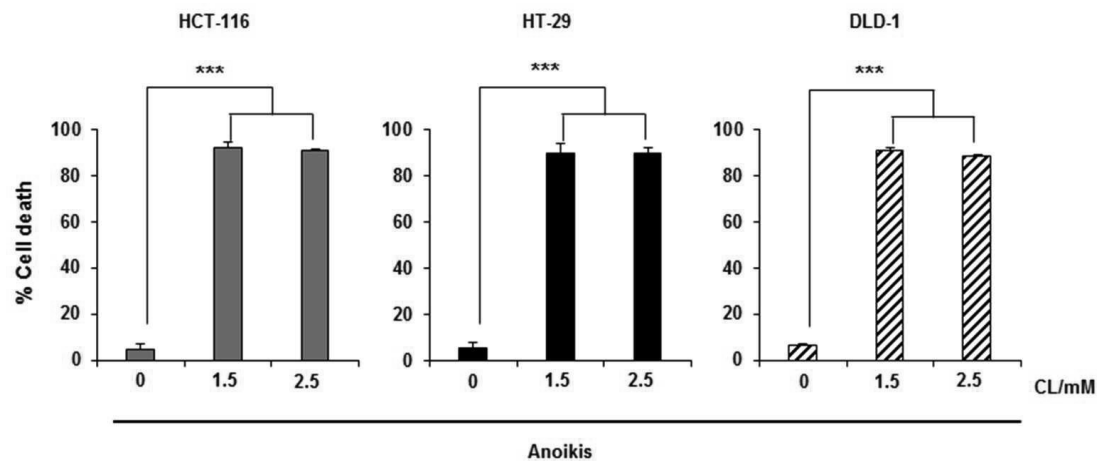


FIG. 27

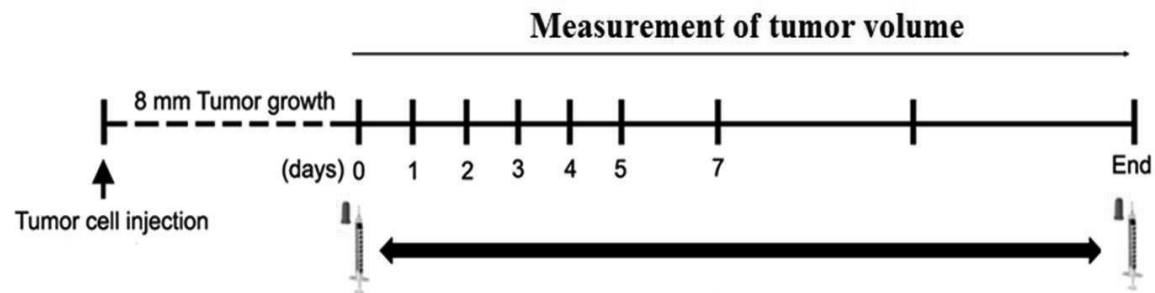


FIG. 28

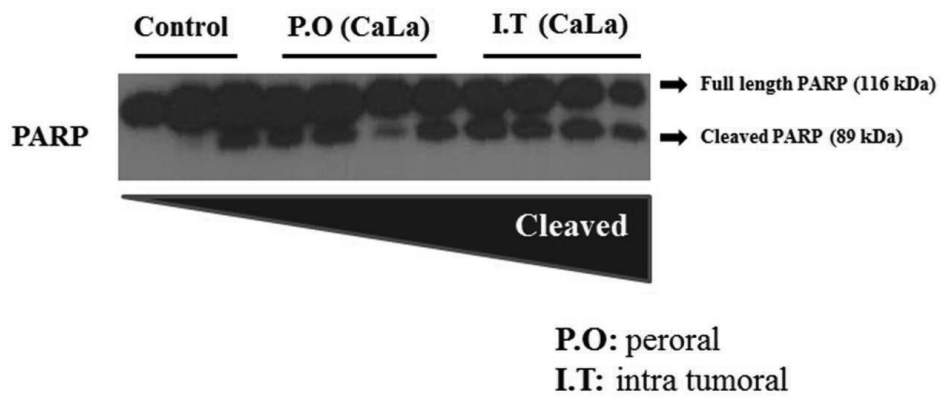


FIG. 29

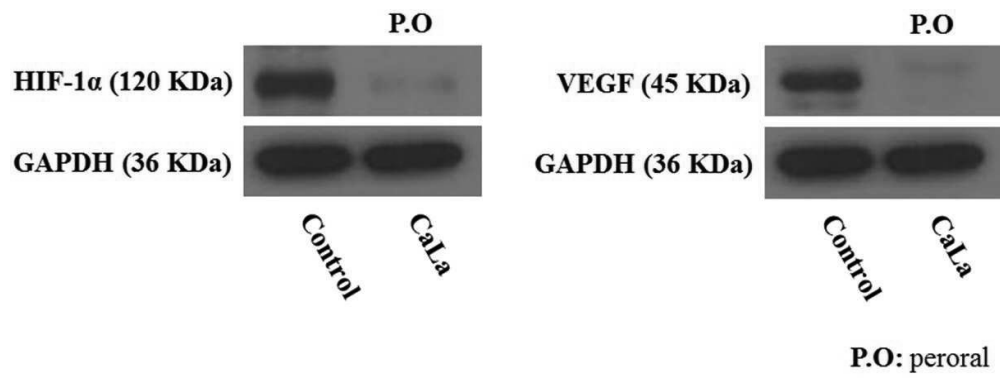


FIG. 30

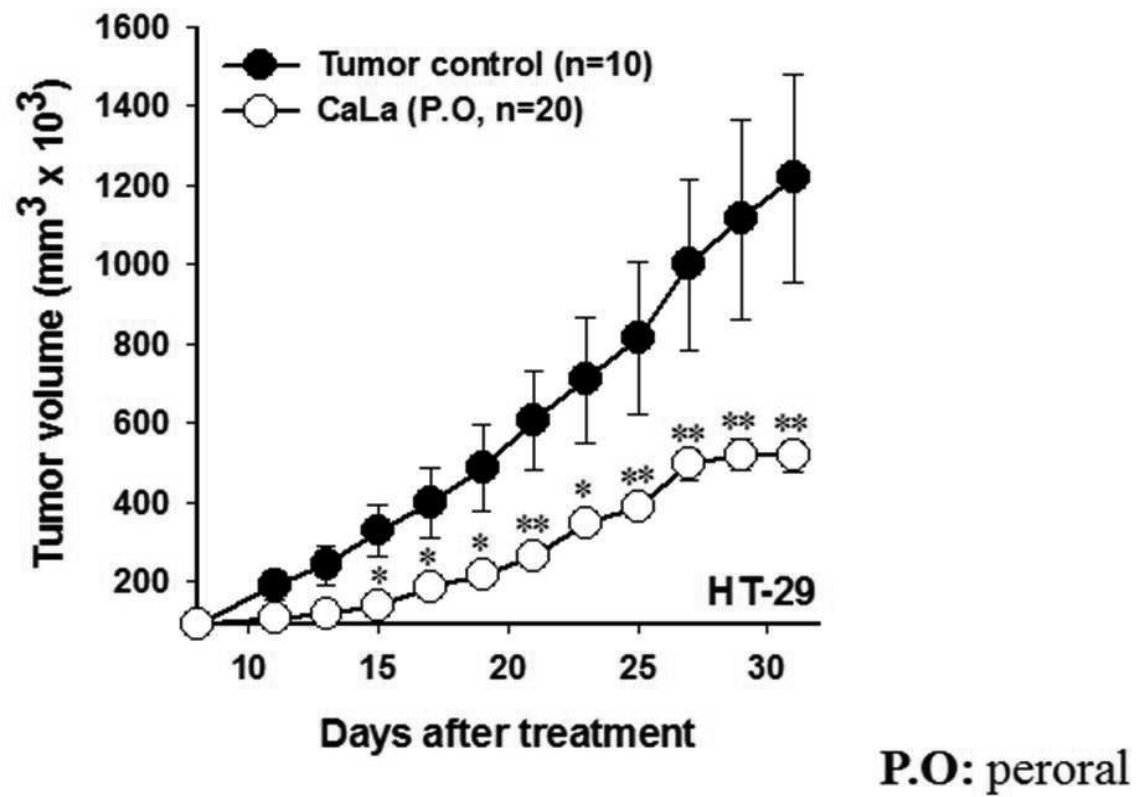


FIG. 31

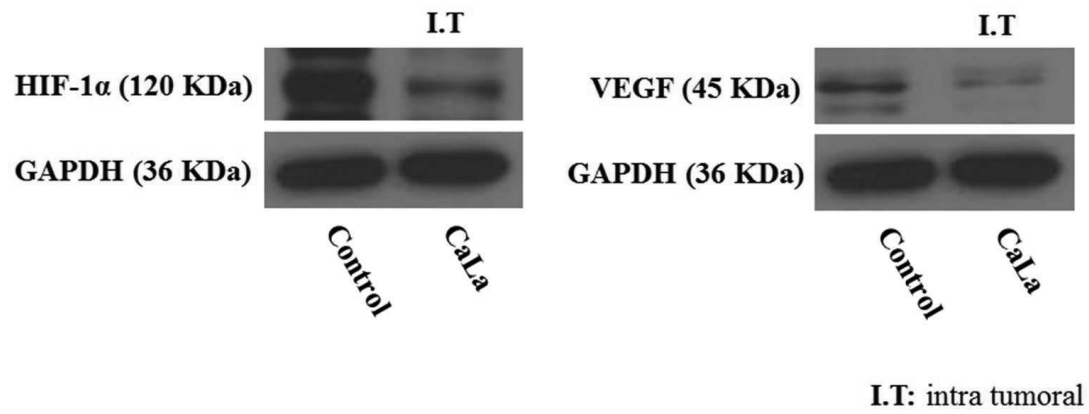


FIG. 32

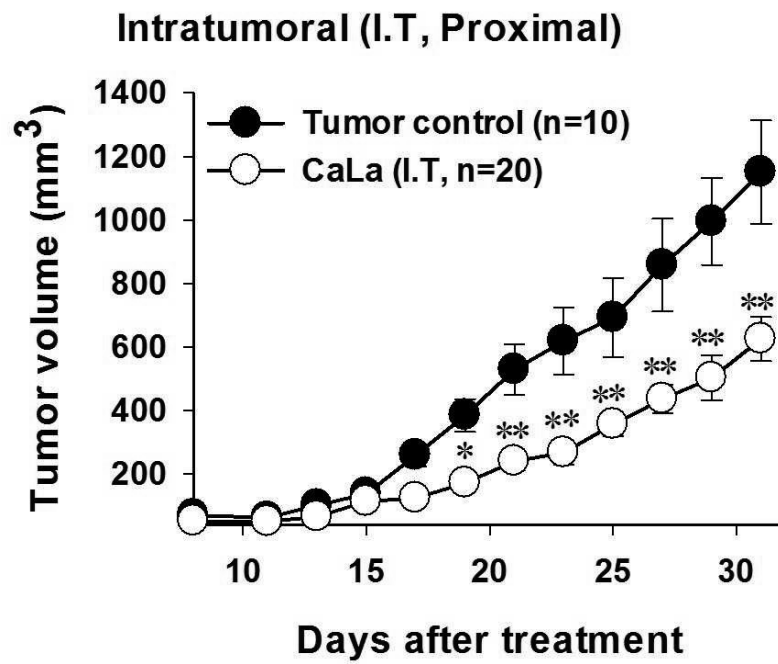


FIG. 33

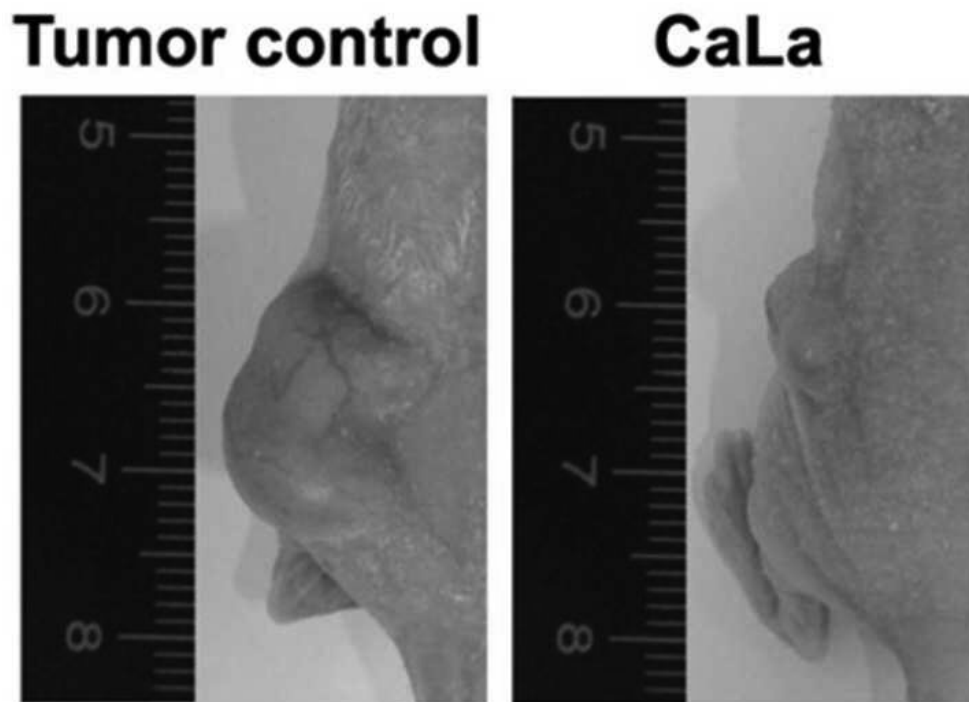


FIG. 34

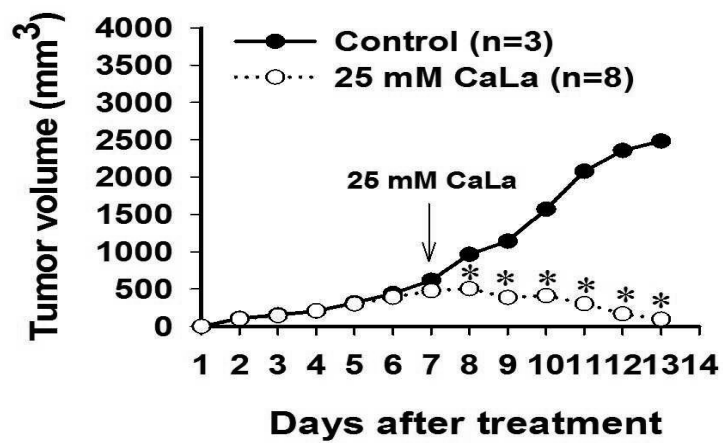


FIG. 35

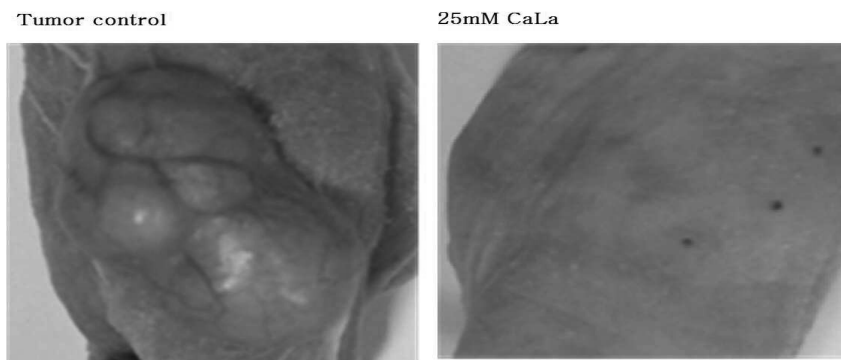


FIG. 36

Fractionated irradiation (2 Gy x 5, total 10 Gy)

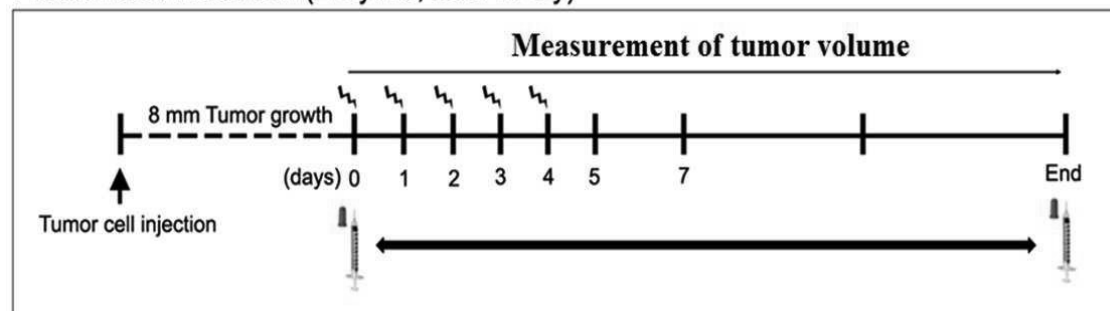


FIG. 37a

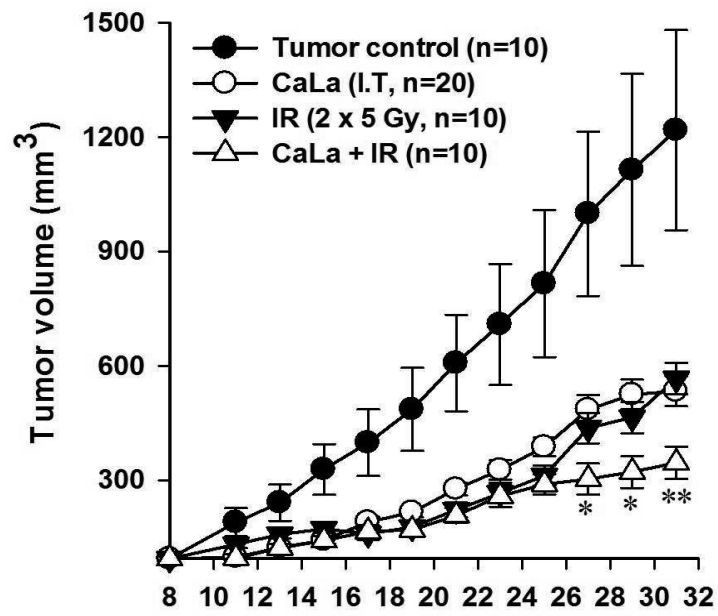


FIG. 37b

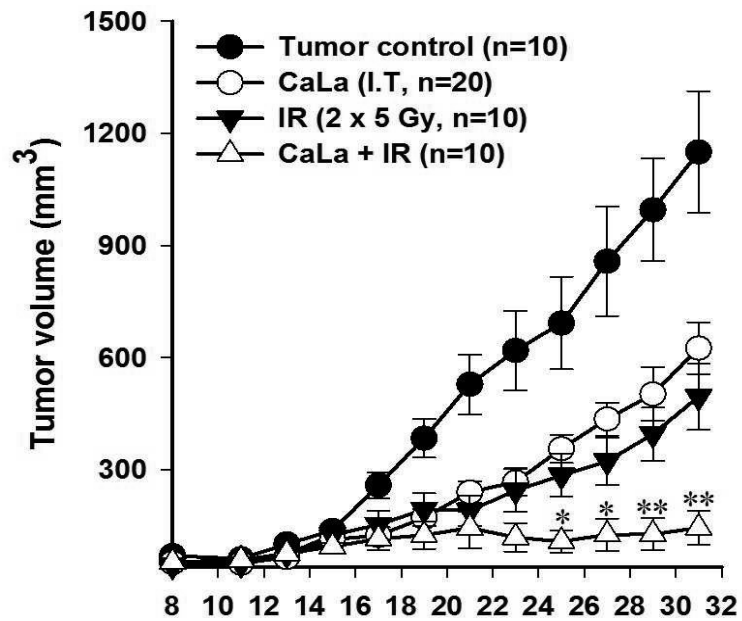


FIG. 38a

- Gastrointestinal stromal tumors

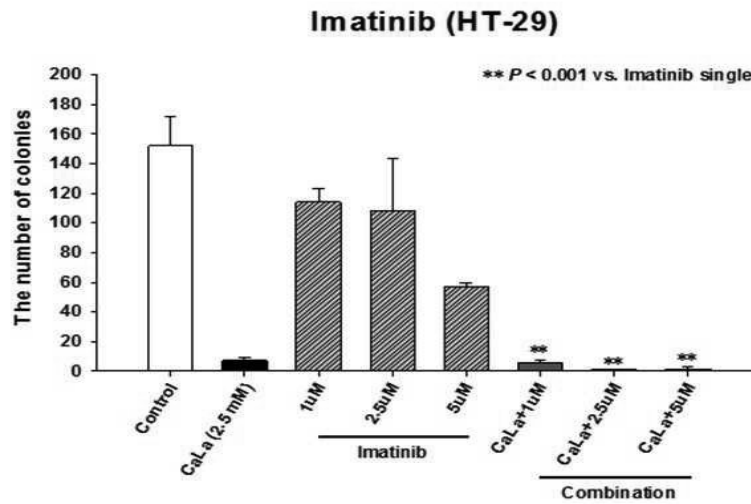


FIG. 38b

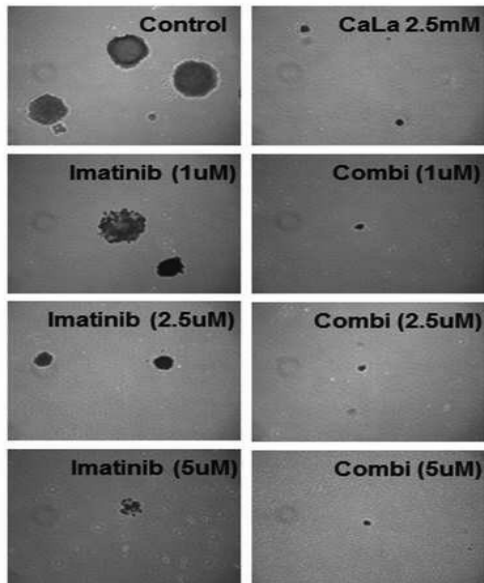


FIG. 39a

- Gastrointestinal stromal tumors

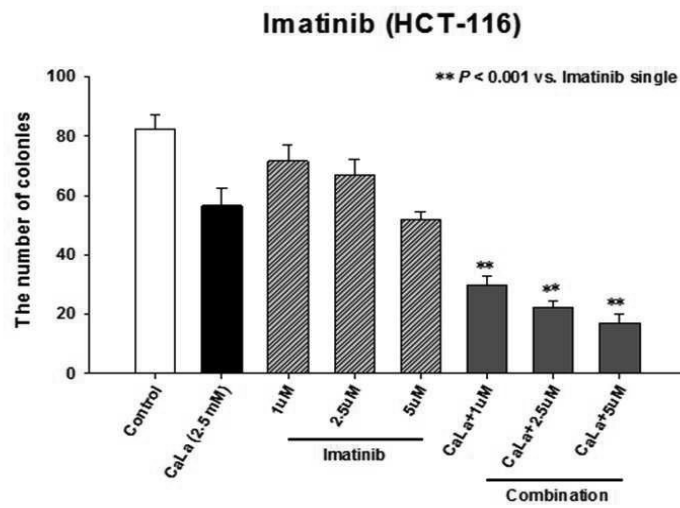


FIG. 39b

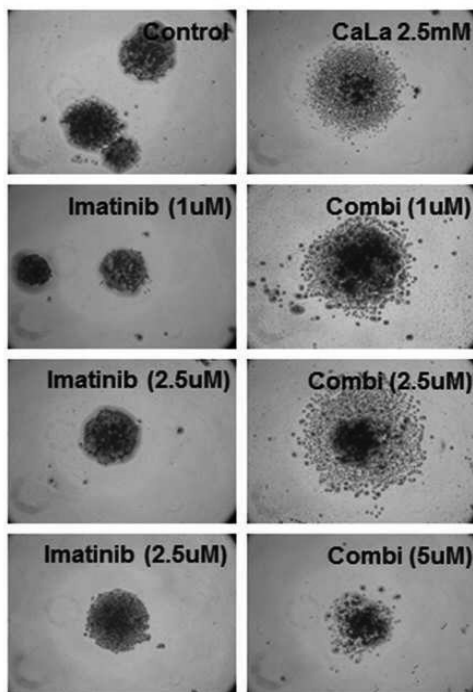


FIG. 40a

- Colorectal and oesophageal cancers

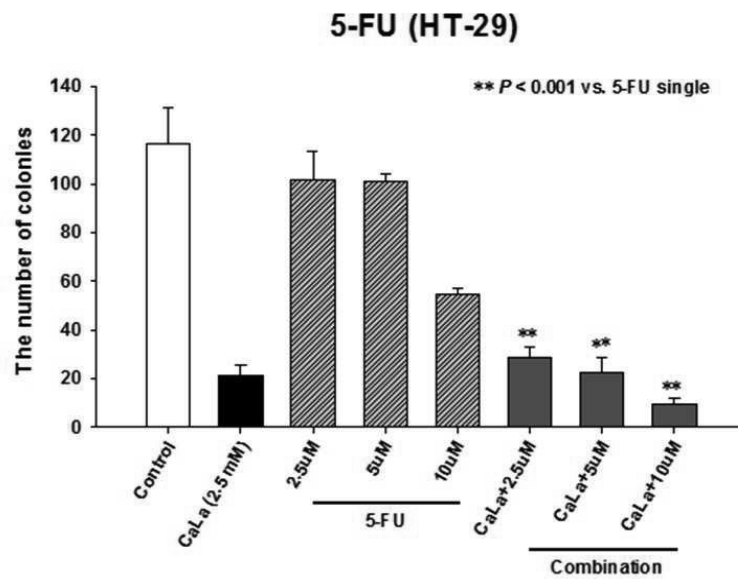


FIG. 40b

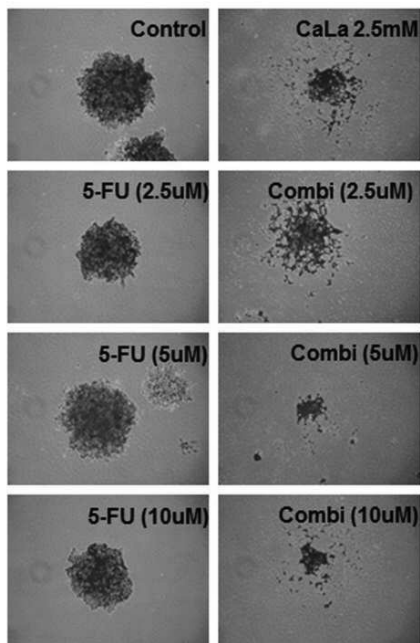


FIG. 41a

- Colorectal and oesophageal cancers

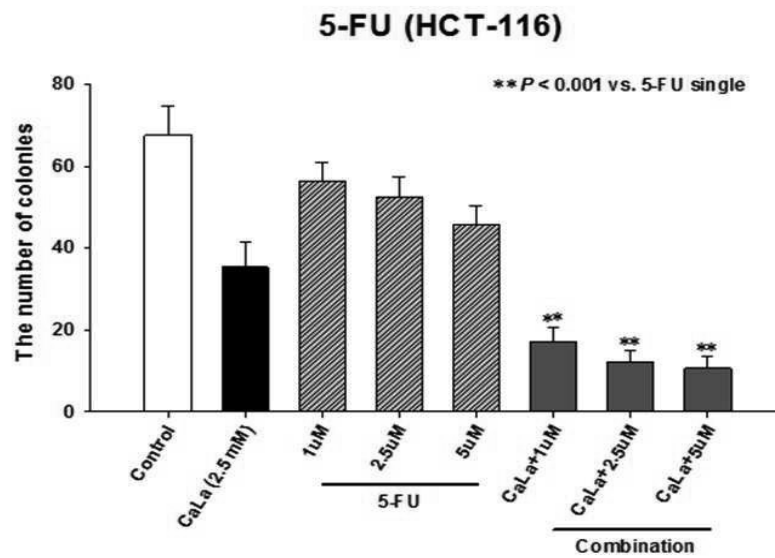


FIG. 41b

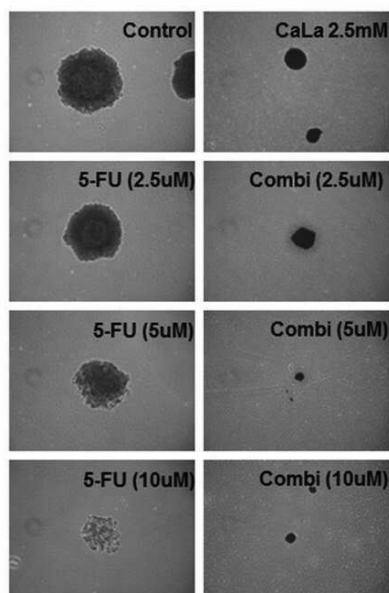


FIG. 42a

- Ovarian cancer, Breast cancer, Lung cancer cancer

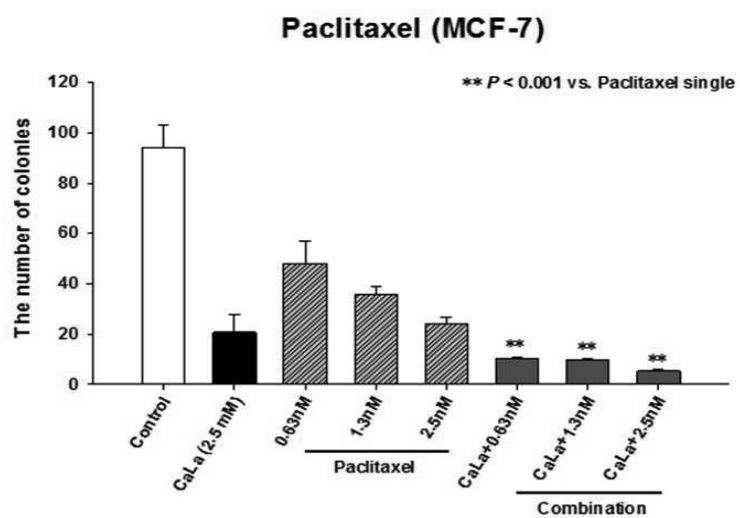


FIG. 42b

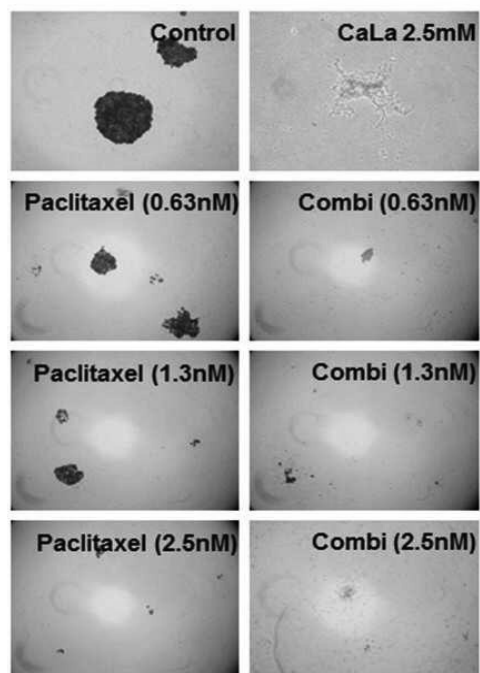


FIG. 43a

- Ovarian cancer, Breast cancer, Lung cancer cancer

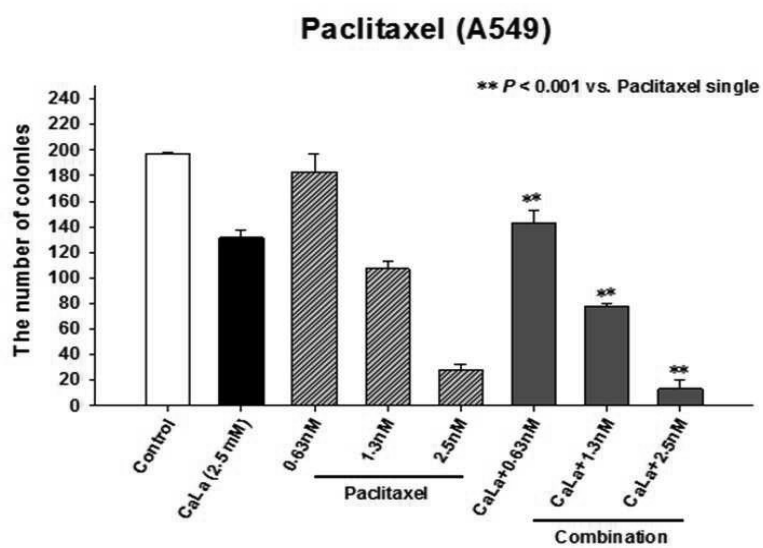


FIG. 43b

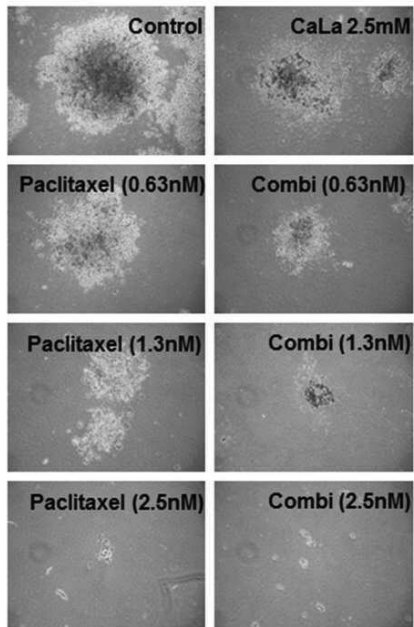


FIG. 44a

• Non-small-cell lung carcinoma

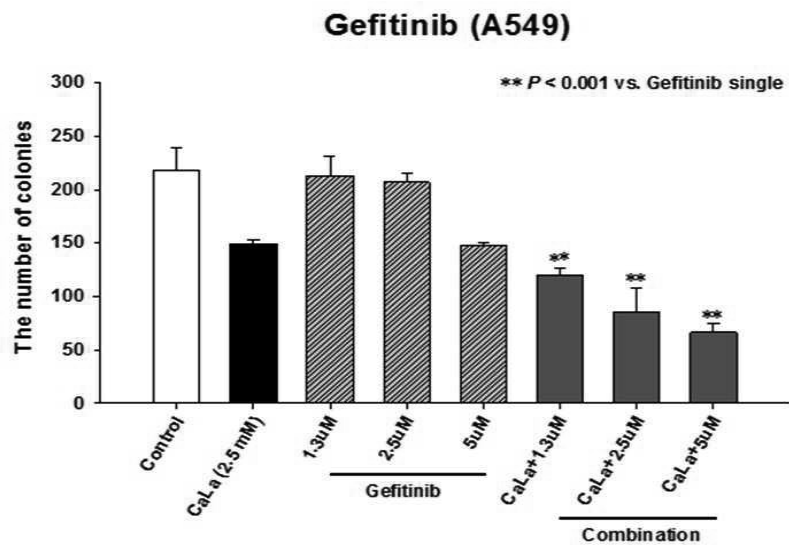


FIG. 44b

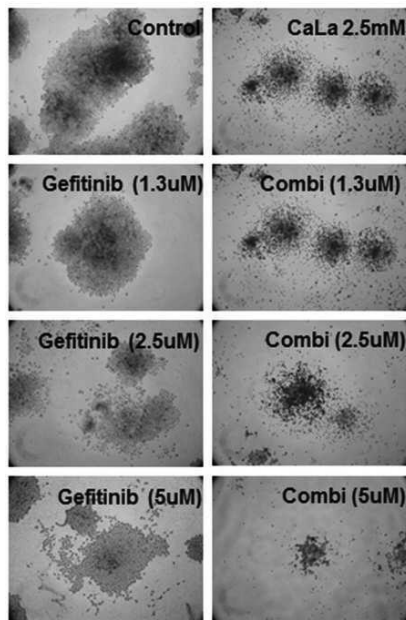


FIG. 45a

- Renal cell carcinoma, Hepatocellular carcinoma, Thyroid cancer.

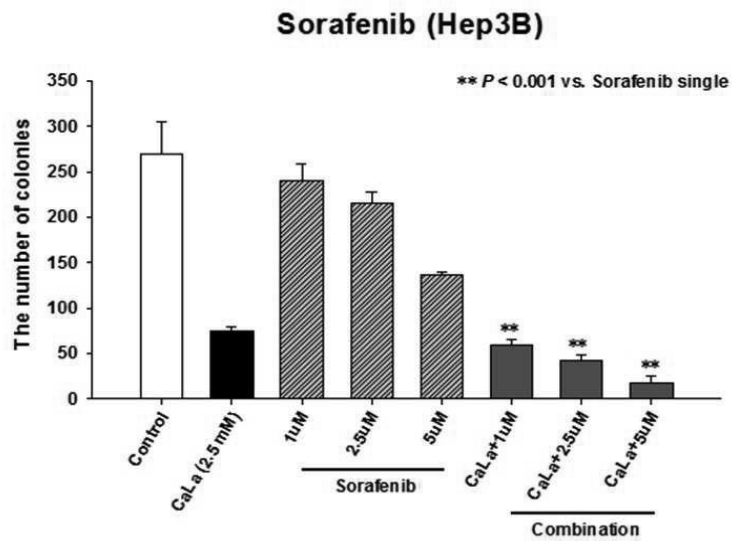


FIG. 45b

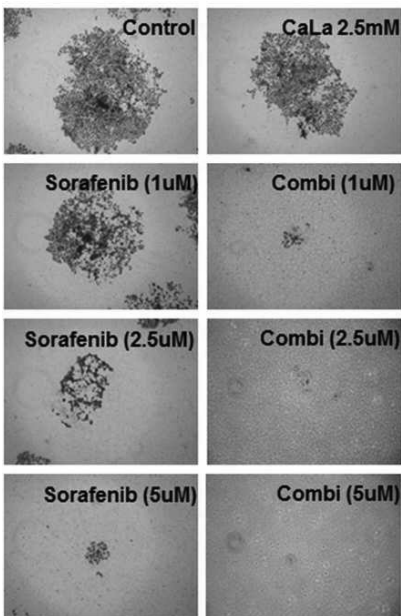


FIG. 46a

• Colorectal cancer

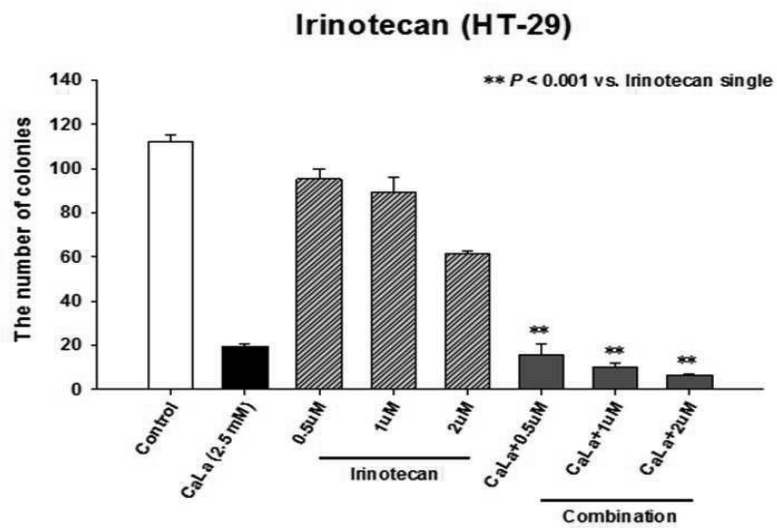


FIG. 46b

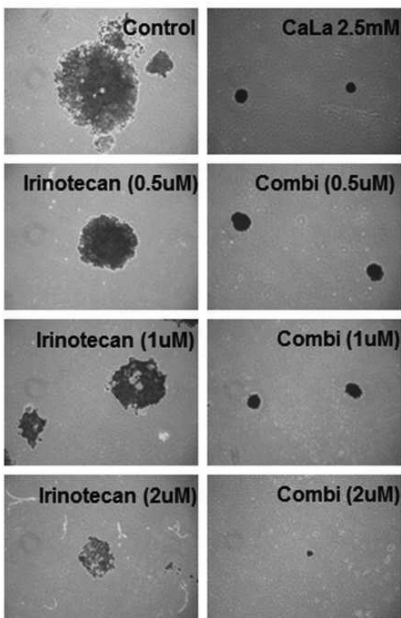


FIG. 47a

• Non-small cell lung cancer

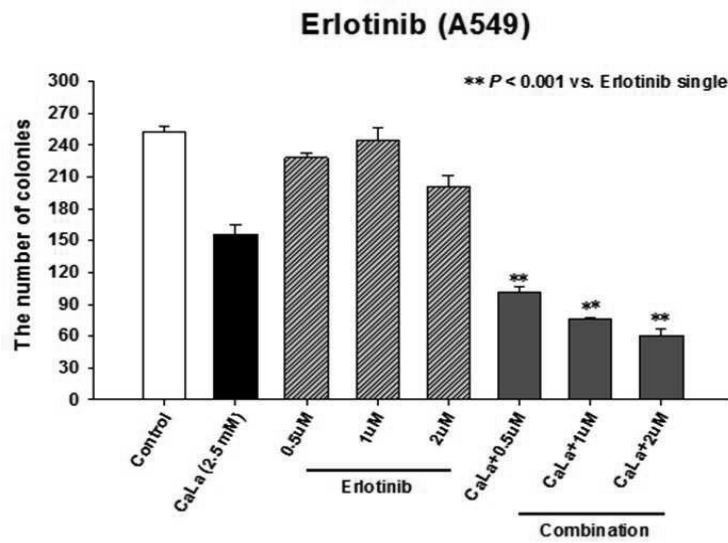


FIG. 47b

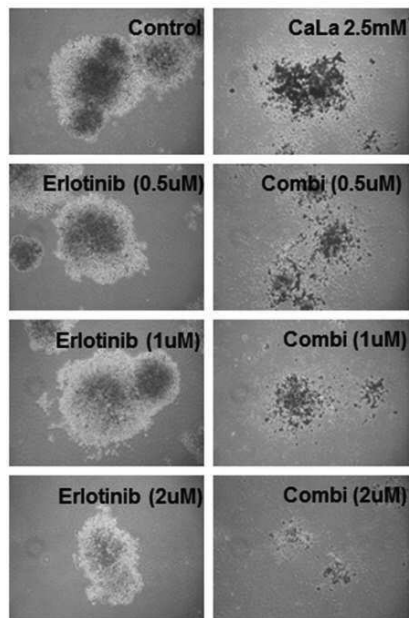


FIG. 48a

- Renal cell carcinoma, gastrointestinal stromal tumor

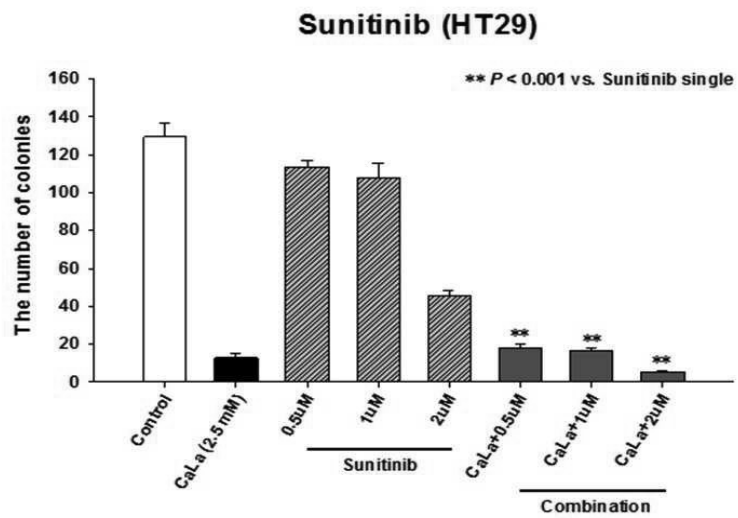


FIG. 48b

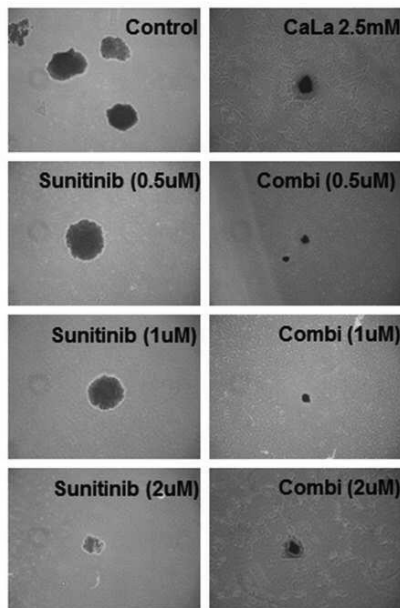


FIG. 49a

• Breast, lung cancer

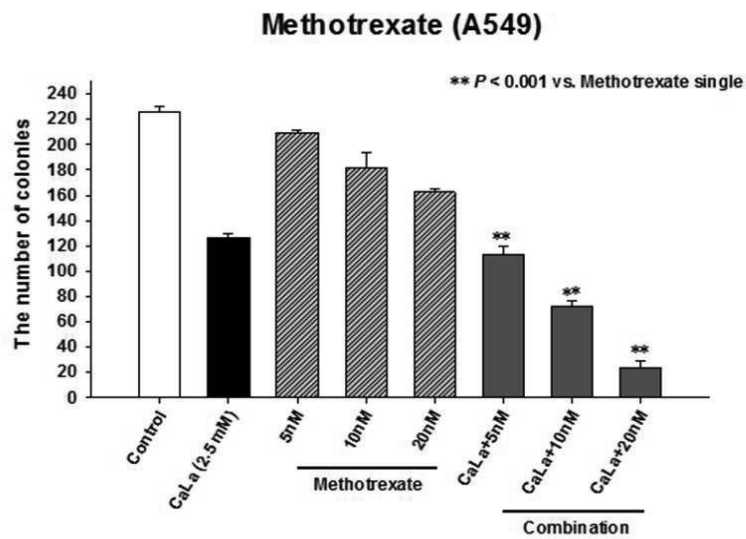


FIG. 49b

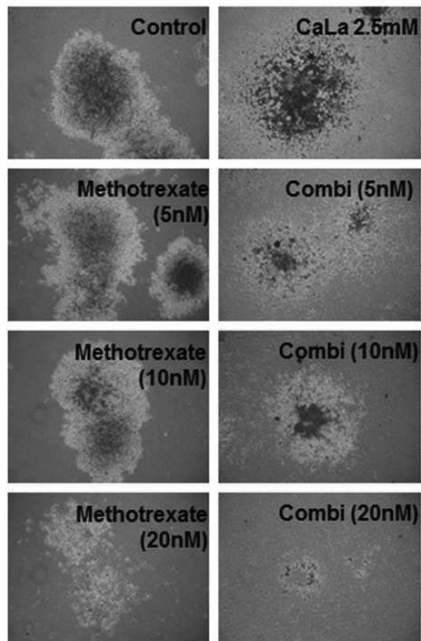


FIG. 50a

- Ovarian carcinoma, lung, head and neck cancers

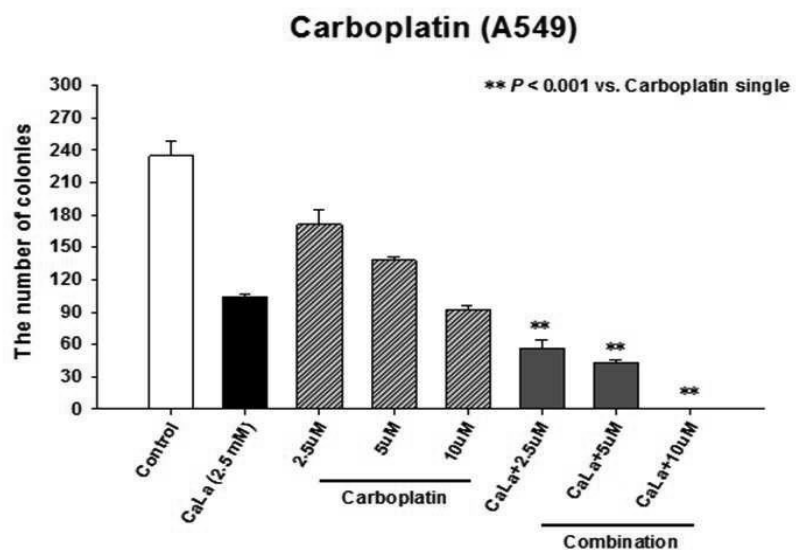


FIG. 50b

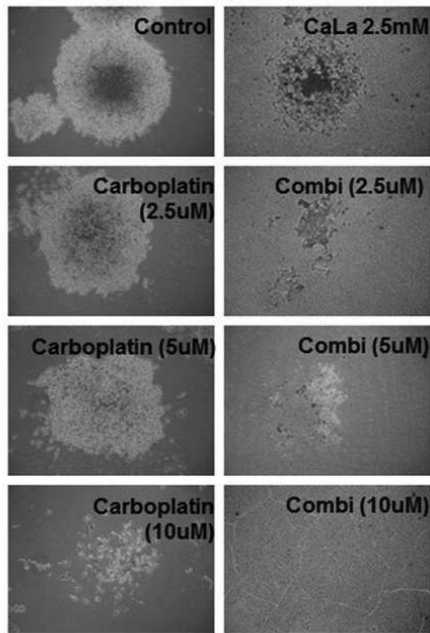


FIG. 51a

- Breast, lung, and ovarian cancer

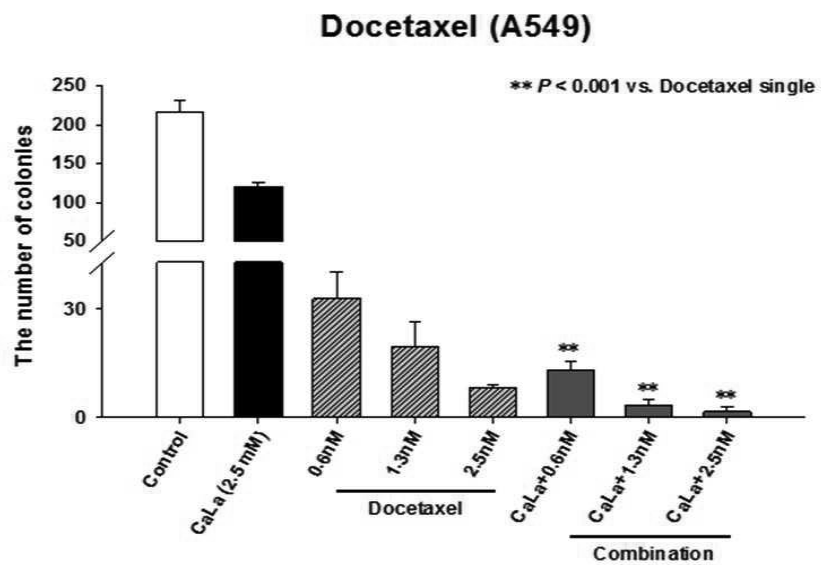


FIG. 51b

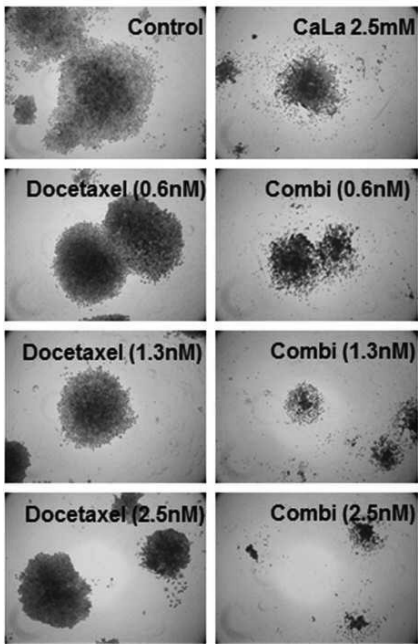


FIG. 52a

• Breast cancer

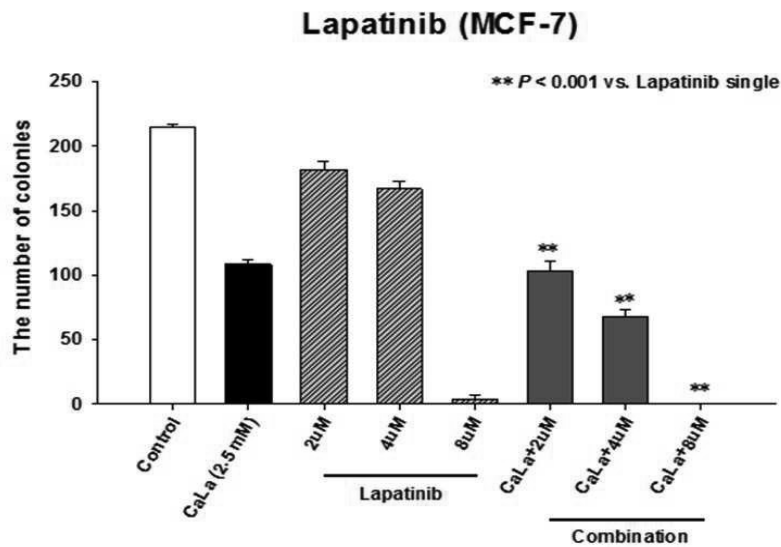


FIG. 52b

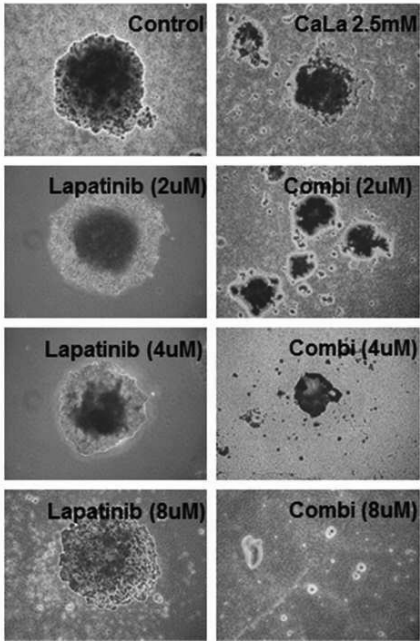


FIG. 53a

• Renal cell cancer

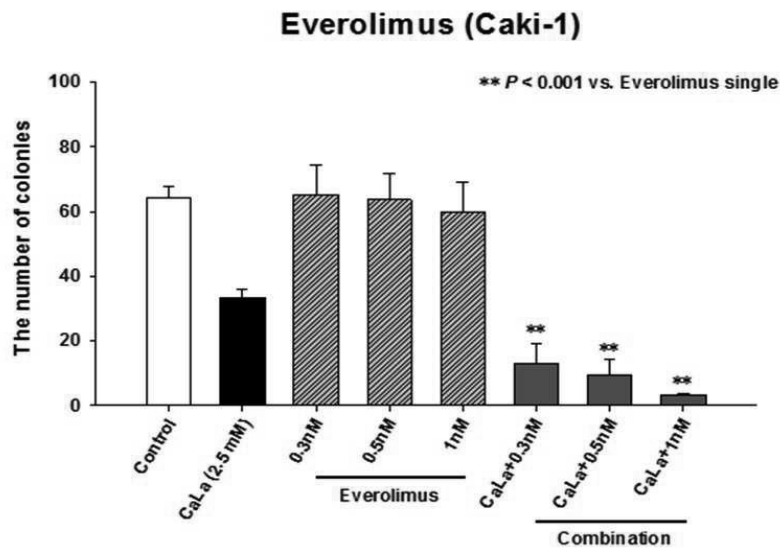


FIG. 53b

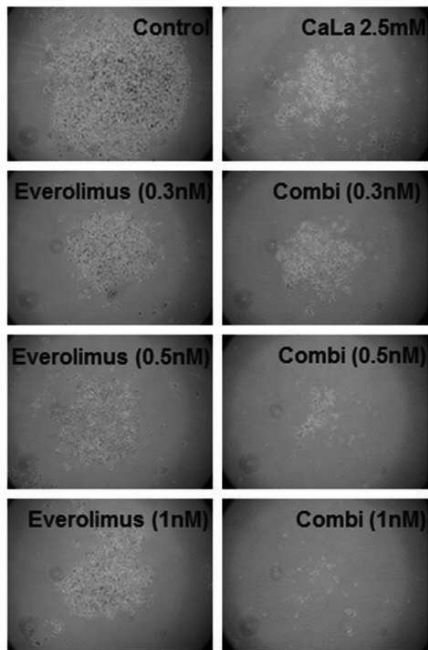


FIG. 54a

- Breast cancer

1% FBS state, + EGF 500ng/ul

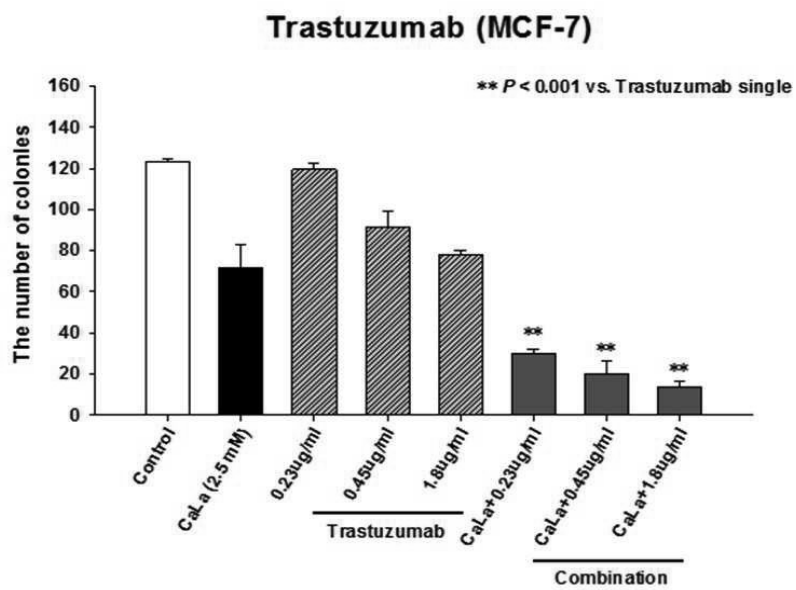


FIG. 54b

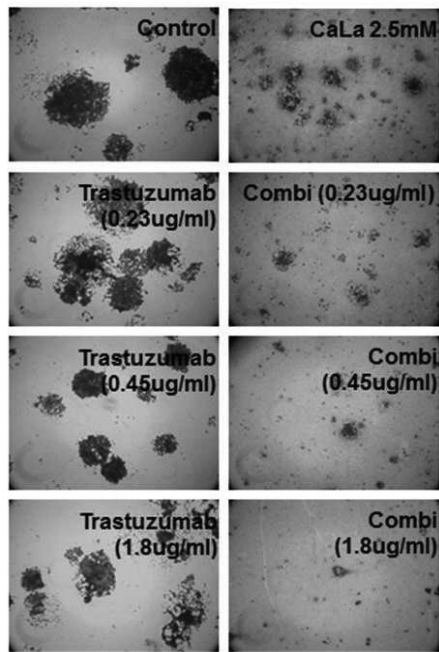


FIG. 55a

- Colorectal cancer

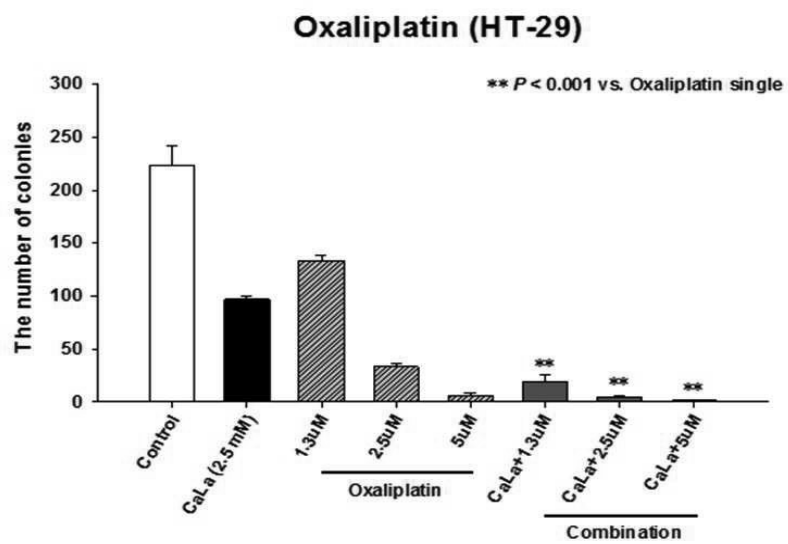


FIG. 55b

