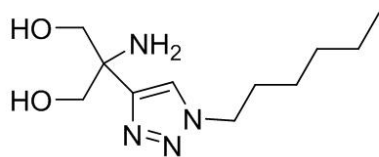
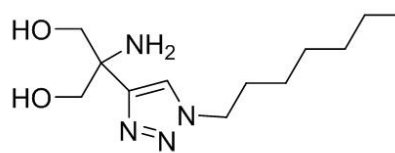


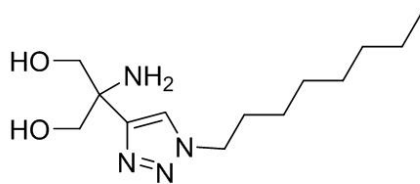
FIG. 1



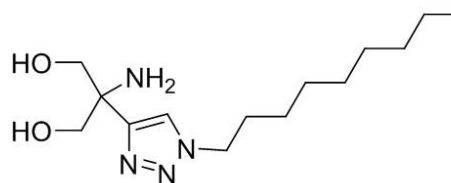
SCNPA 501
Chemical Formula : $C_{11}H_{22}N_4O_2$
Molecular Weight : 242.32



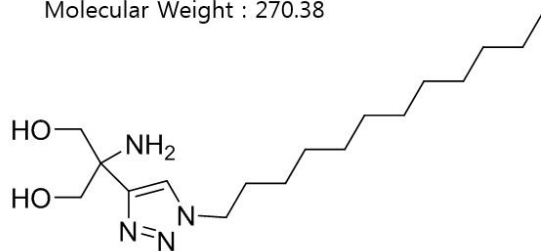
SCNPA 401
Chemical Formula : $C_{12}H_{24}N_4O_2$
Molecular Weight : 257.35



SCNPA 301
Chemical Formula : $C_{13}H_{26}N_4O_2$
Molecular Weight : 270.38

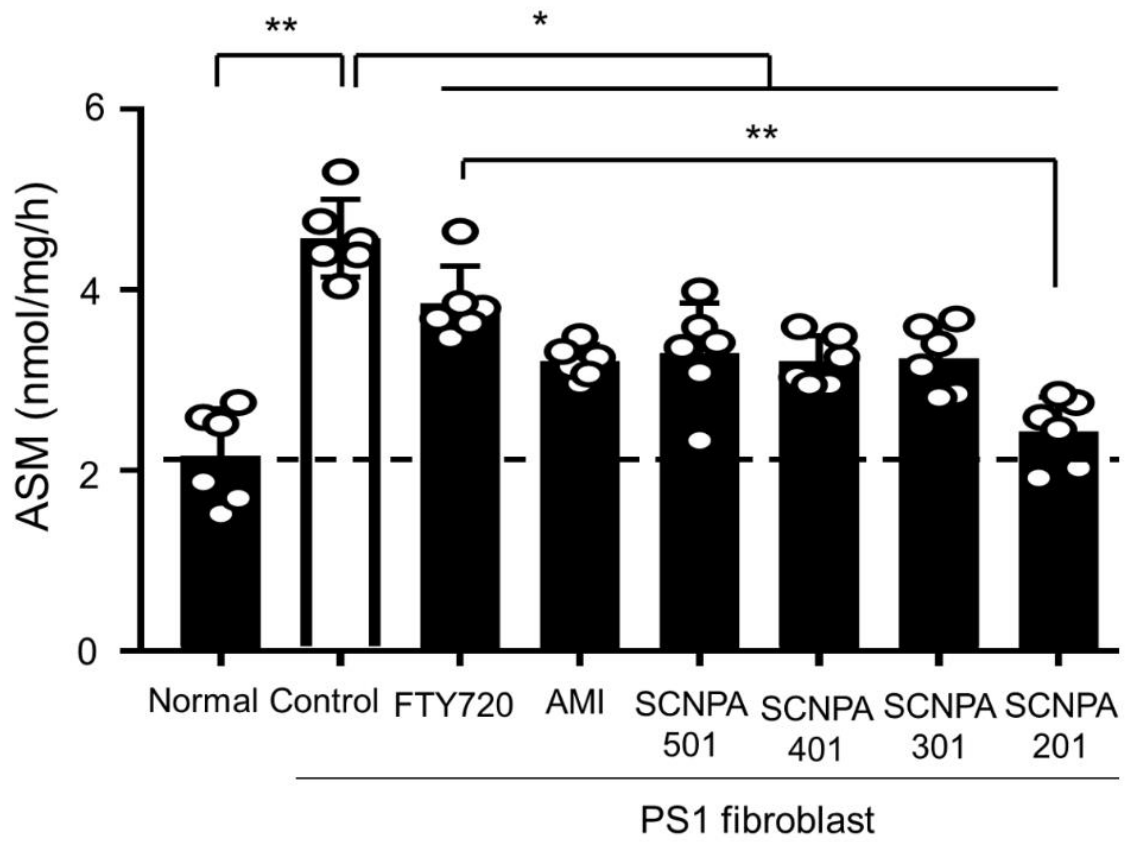


SCNPA 201
Chemical Formula : $C_{14}H_{28}N_4O_2$
Molecular Weight : 284.4



SCNPA 101
Chemical Formula : $C_{17}H_{34}N_4O_2$
Molecular Weight : 362.94

FIG. 2A

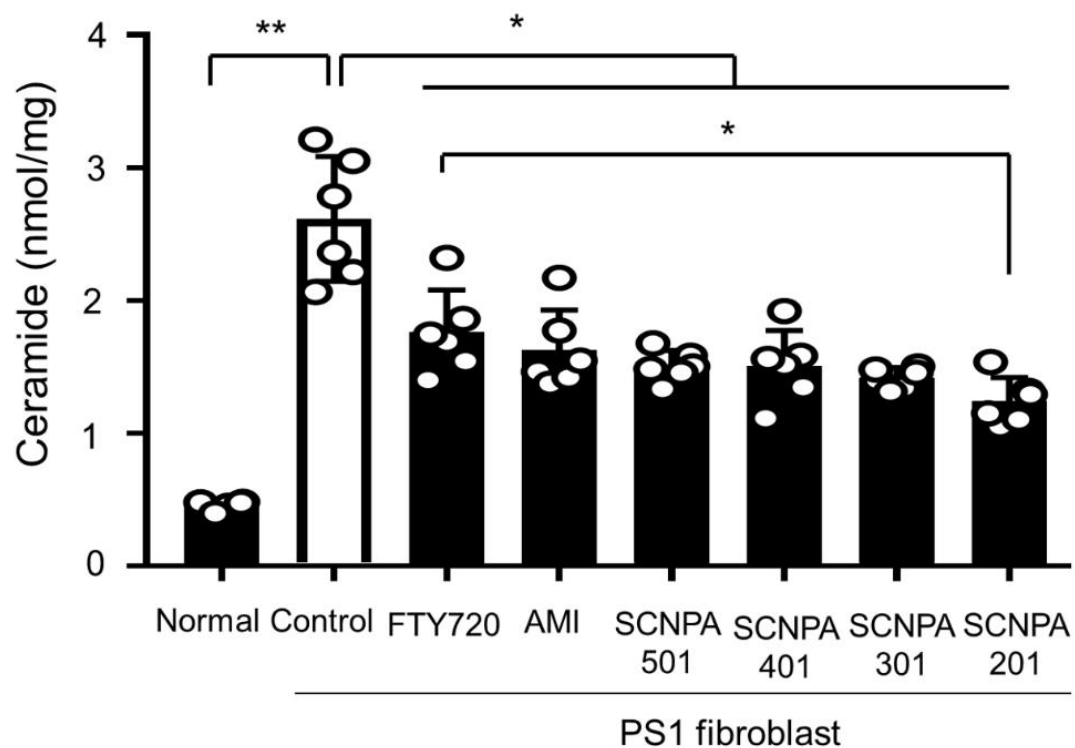


*p < 0.05

**p < 0.01

n = 6

FIG. 2B



*p < 0.05
 **p < 0.01
 n = 6

FIG. 3A

Biochemical IC ₅₀				
Compound	SCNPA 501	SCNPA 401	SCNPA 301	SCNPA 201
ASM IC ₅₀ (uM)	1.86	1.82	1.75	1.14

FIG. 3B

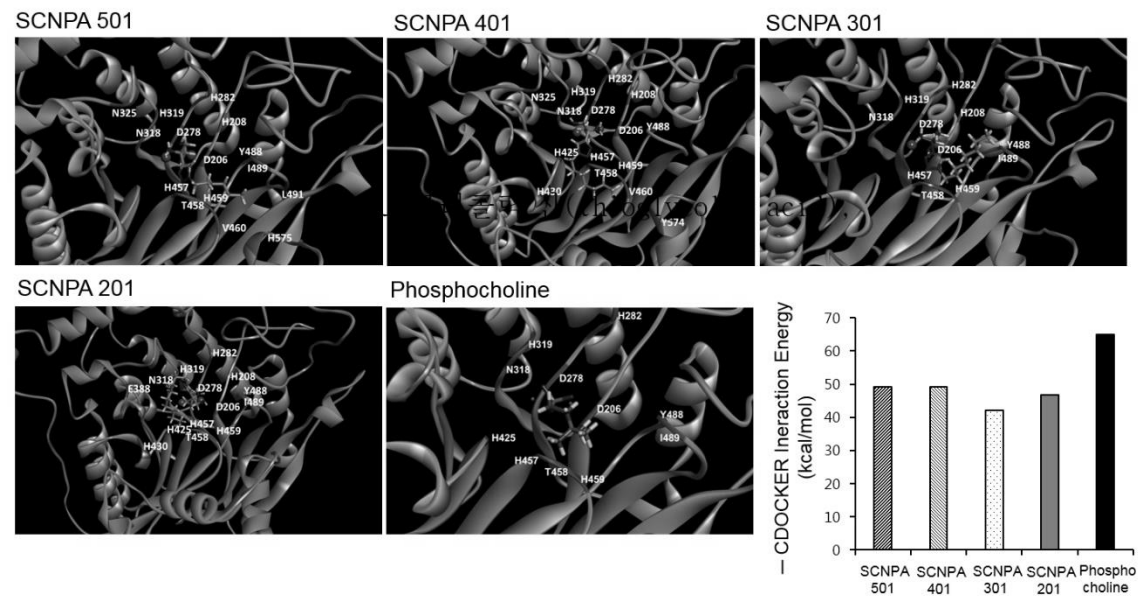
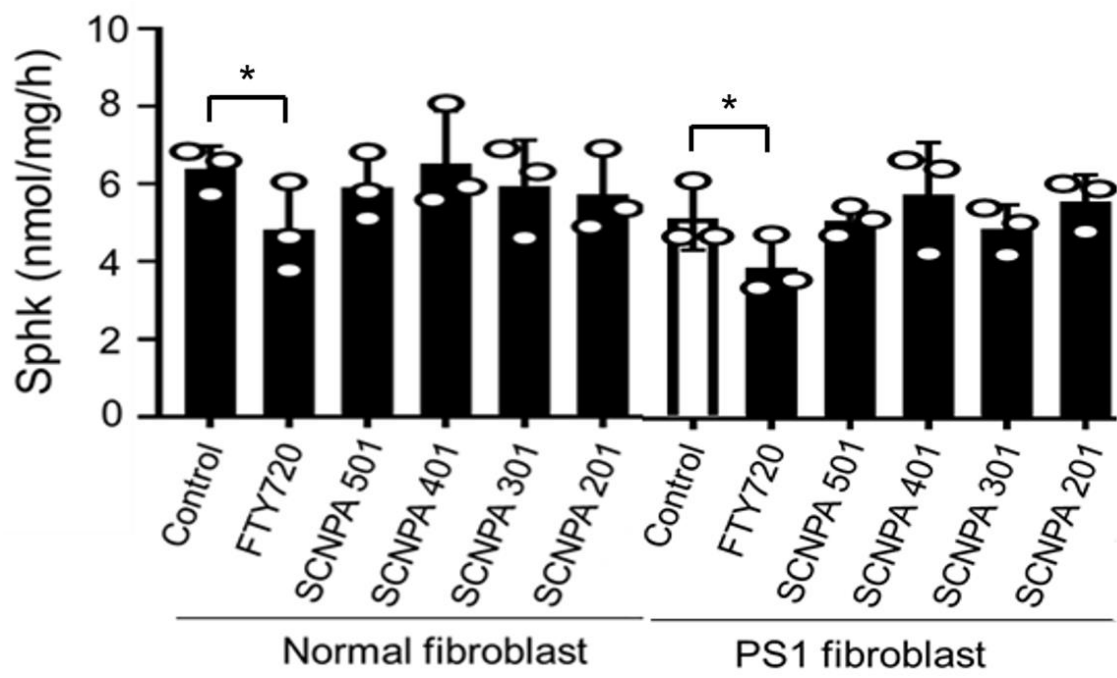
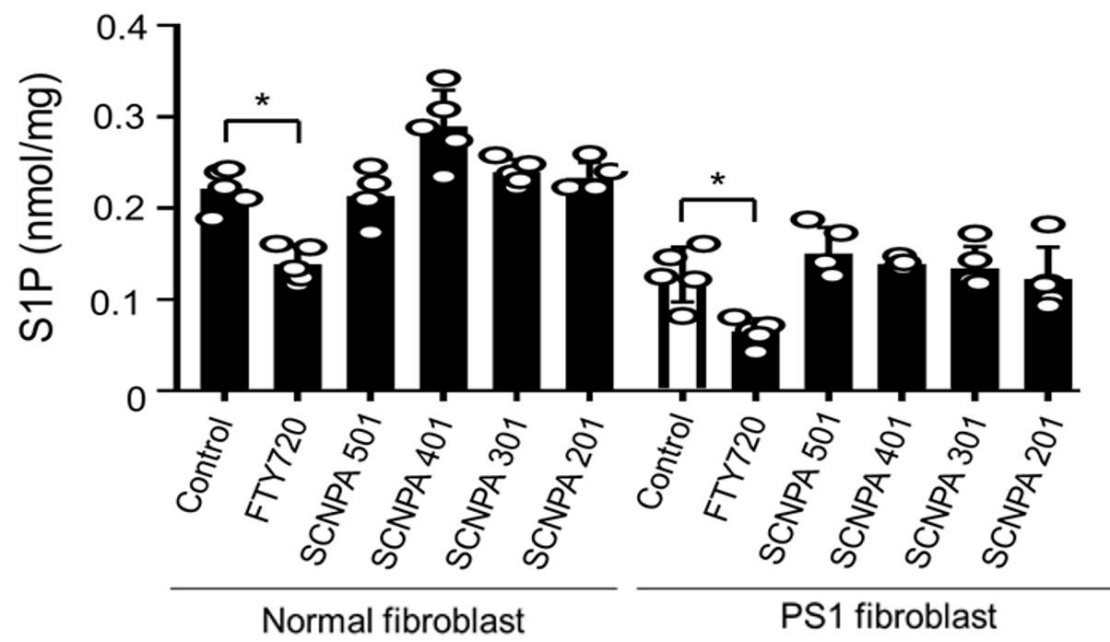


FIG. 4A



*p < 0.05
n = 3~5

FIG. 4B



*p < 0.05
n = 3~5

FIG. 4C

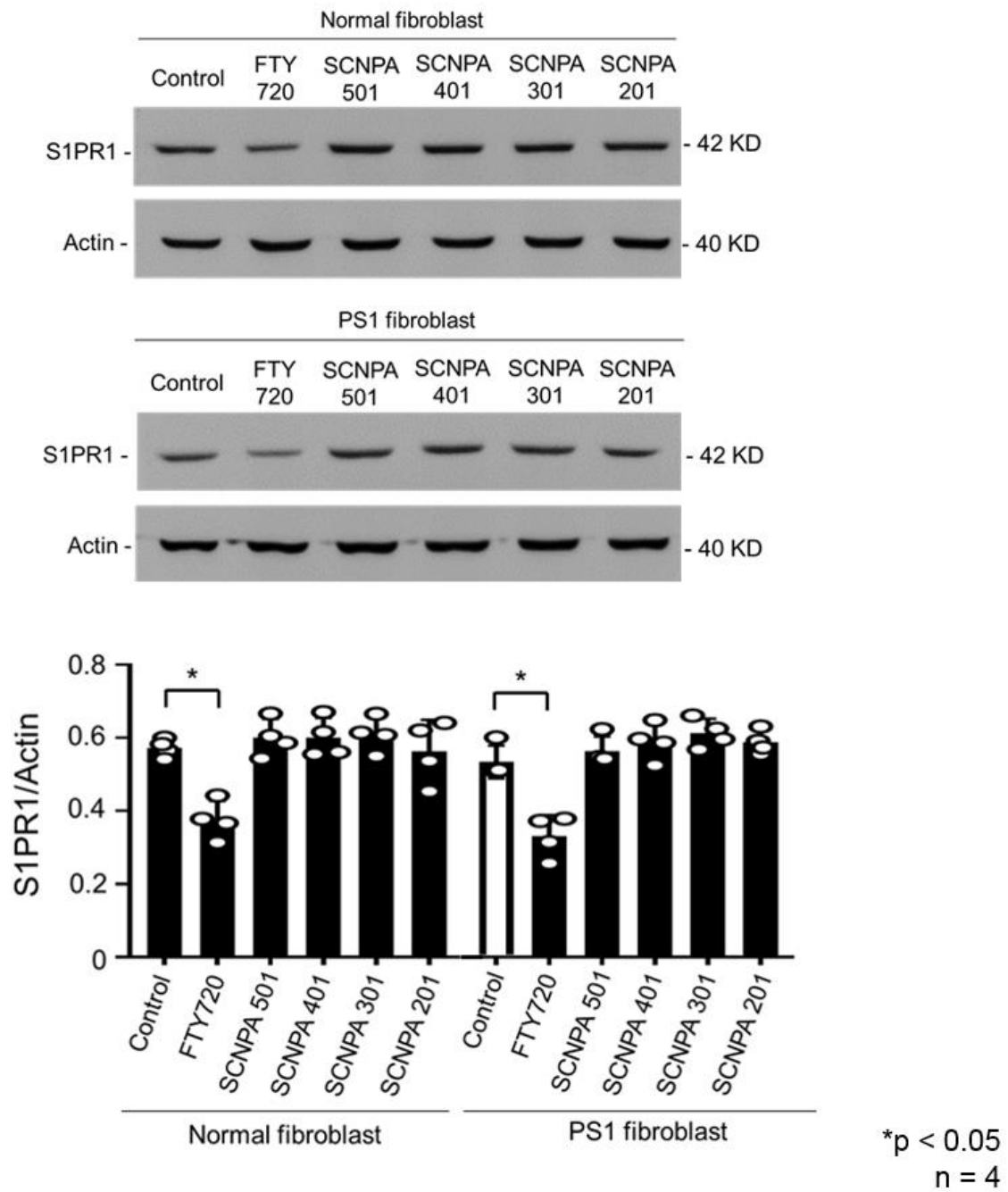


FIG. 5A

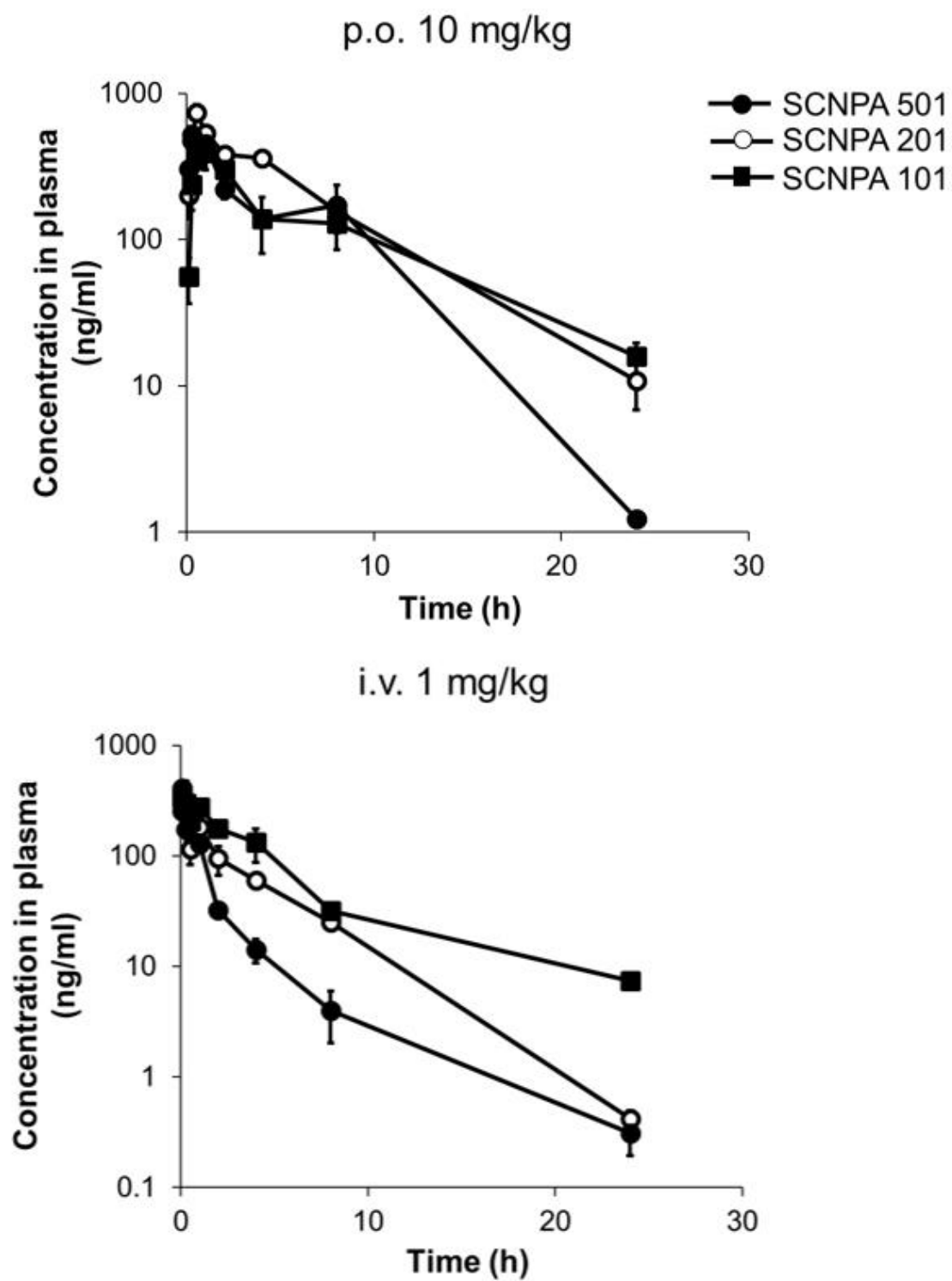


FIG. 5B

PK parameter (Plasma)	SCNPA 501		SCNPA 201		SCNPA 101	
	p.o. 10 mg/kg	i.v. 1 mg/kg	p.o. 10 mg/kg	i.v. 1 mg/kg	p.o. 10 mg/kg	i.v. 1 mg/kg
AUC _{last} (ng·h/mL)	3128.46±2764.97	427.10±27.85	4158.27±358.61	850.97±80.60	2760.25±936.03	1423.06±207.38
AUC _{inf} (ng·h/mL)	3130.75±2764.59	433.24±29.66	4286.30±250.86	852.16±81.13	2900.65±997.07	1477.10±197.74
Half-life _{plasma} (h)	2.54±0.31	3.14±1.65	4.27±1.44	4.83±0.26	5.99±0.60	5.07±0.95
MRT (h)	4.2±2.05	2.54±0.80	6.09±1.46	3.84±0.5	7.06±0.84	5.47±0.30
C _{max} (ng/mL)	554.74±91.95	/	748.18±225.27	/	438.81±115.98	/
Co (ng/mL)	/	631.89±106.79	/	365.40±293.42	/	525.02±158.25
T _{max} (h)	0.50±0.43	/	0.63±0.31	/	0.58±0.38	/
BA (%)	72.26	/	50.33	/	19.64	/

AUC, Area under curve to last time point; MRT, Mean resident time; BA, Bioavailability

n = 3

FIG. 6A

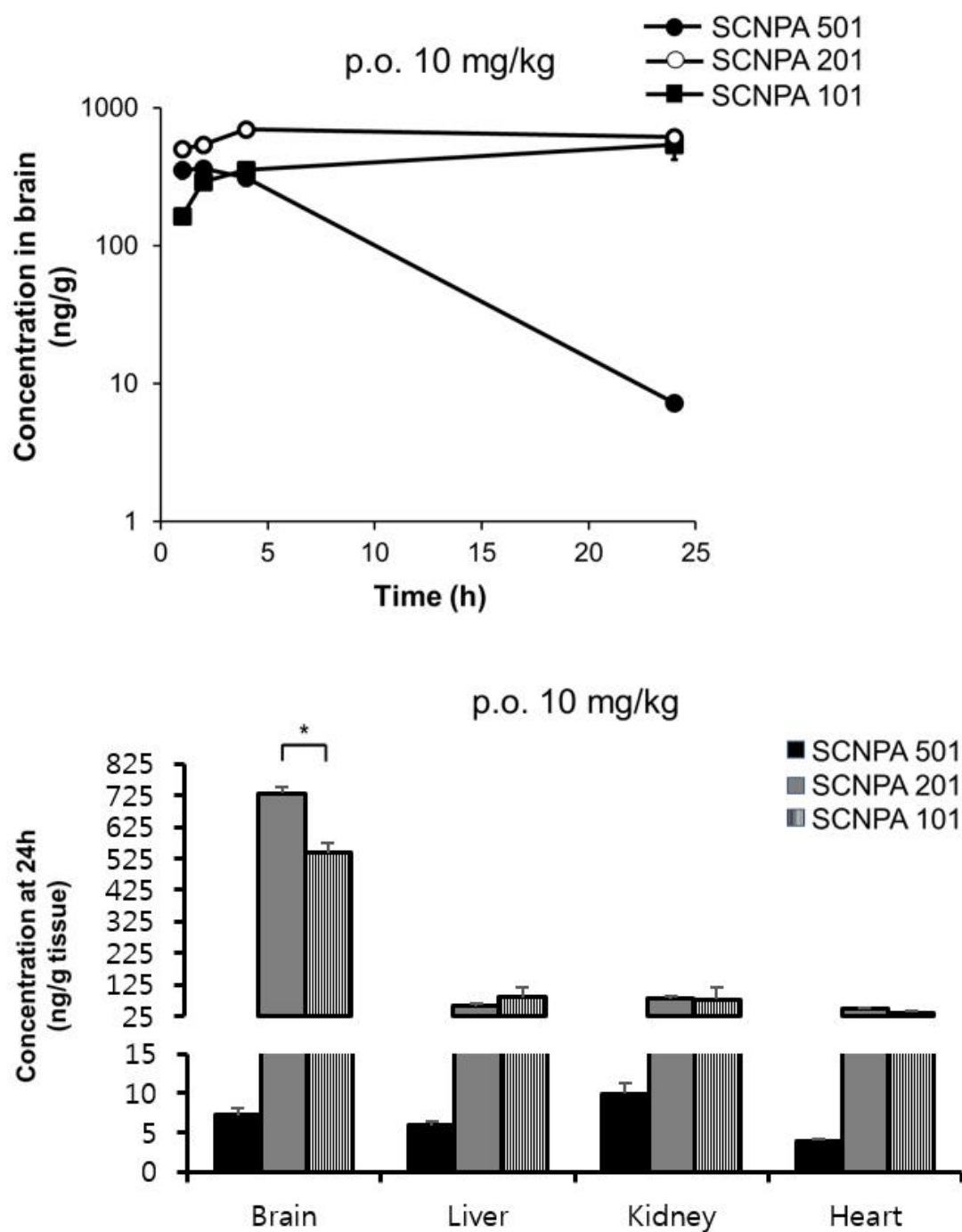


FIG. 6B

PK parameter (Brain)	SCNPA 501	SCNPA 201	SCNPA 101
	p.o. 10 mg/kg	p.o. 10 mg/kg	p.o. 10 mg/kg
AUC _{last} (ng·h/mL)	4424.24±750.22	15124.37±2967.43	9961.12±1911.20
C _{max} (ng/mL)	413.96±36.89	727.58±90.91	545.36±207.55
Co (ng/mL)	/	/	/
T _{max} (h)	2.33±1.53	6.83±8.5	17.33±11.55
MRT (h)	3.83±0.12	11.80±1.38	14.50±2.14
Brain distribution	1.41	3.64	3.61

AUC, Area under curve to last time point; MRT, Mean resident time

n = 3

FIG. 7A

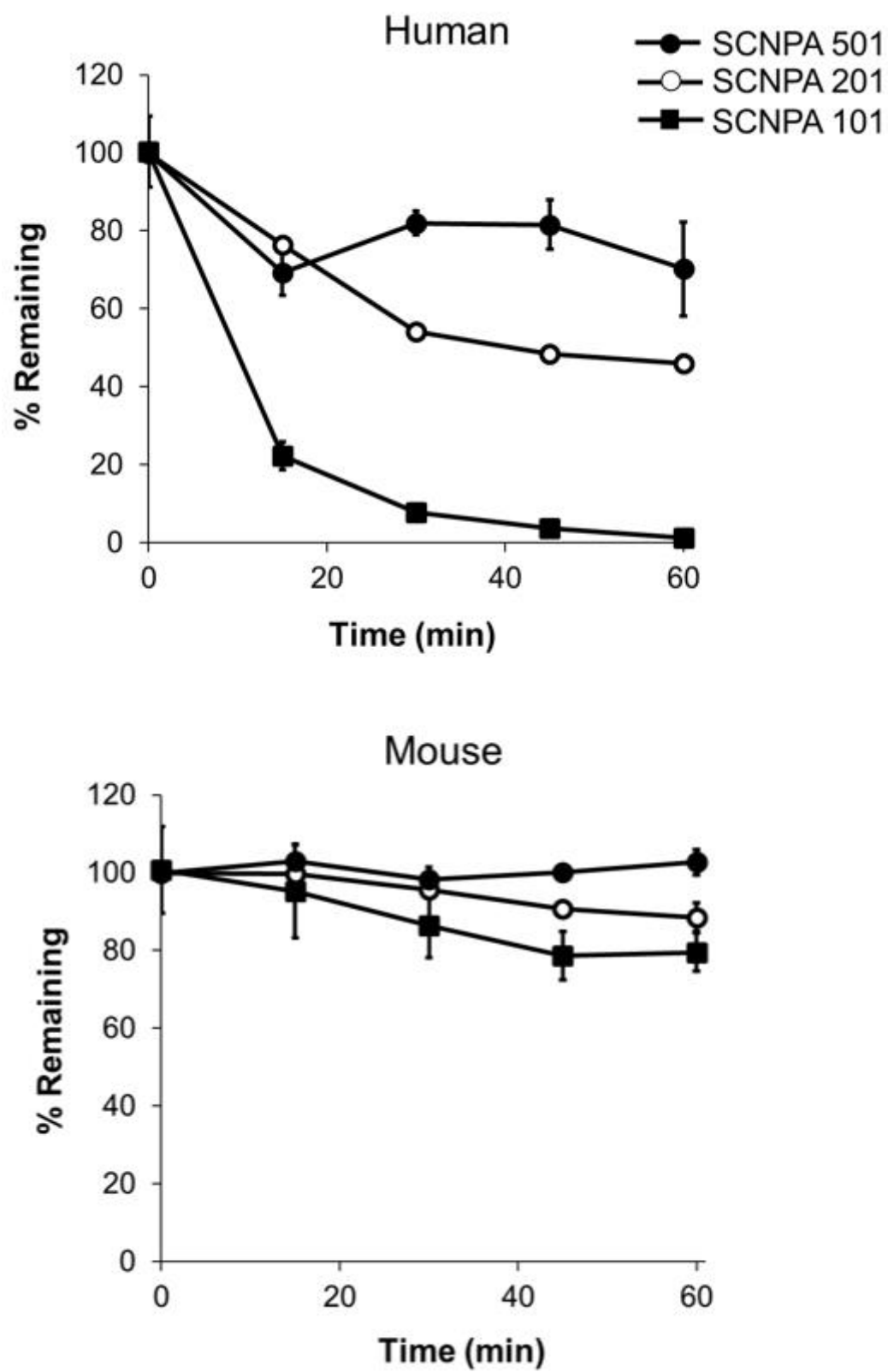


FIG. 7B

Compound	Microsome	% remaining after 0.5h		half-life (h)
		mean	SD	
SCNPA 501	Human	82.01	3.08	3.12
	Mouse	98.21	3.24	41.71
SCNPA 201	Human	54.17	0.62	0.85
	Mouse	95.66	1.28	5.13
SCNPA 101	Human	7.80	1.43	0.16
	Mouse	86.36	8.13	2.57

n = 3

FIG. 8

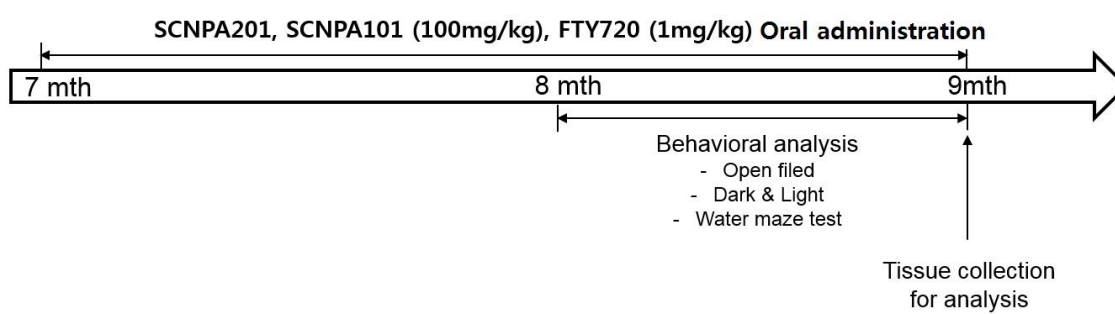


FIG. 9A

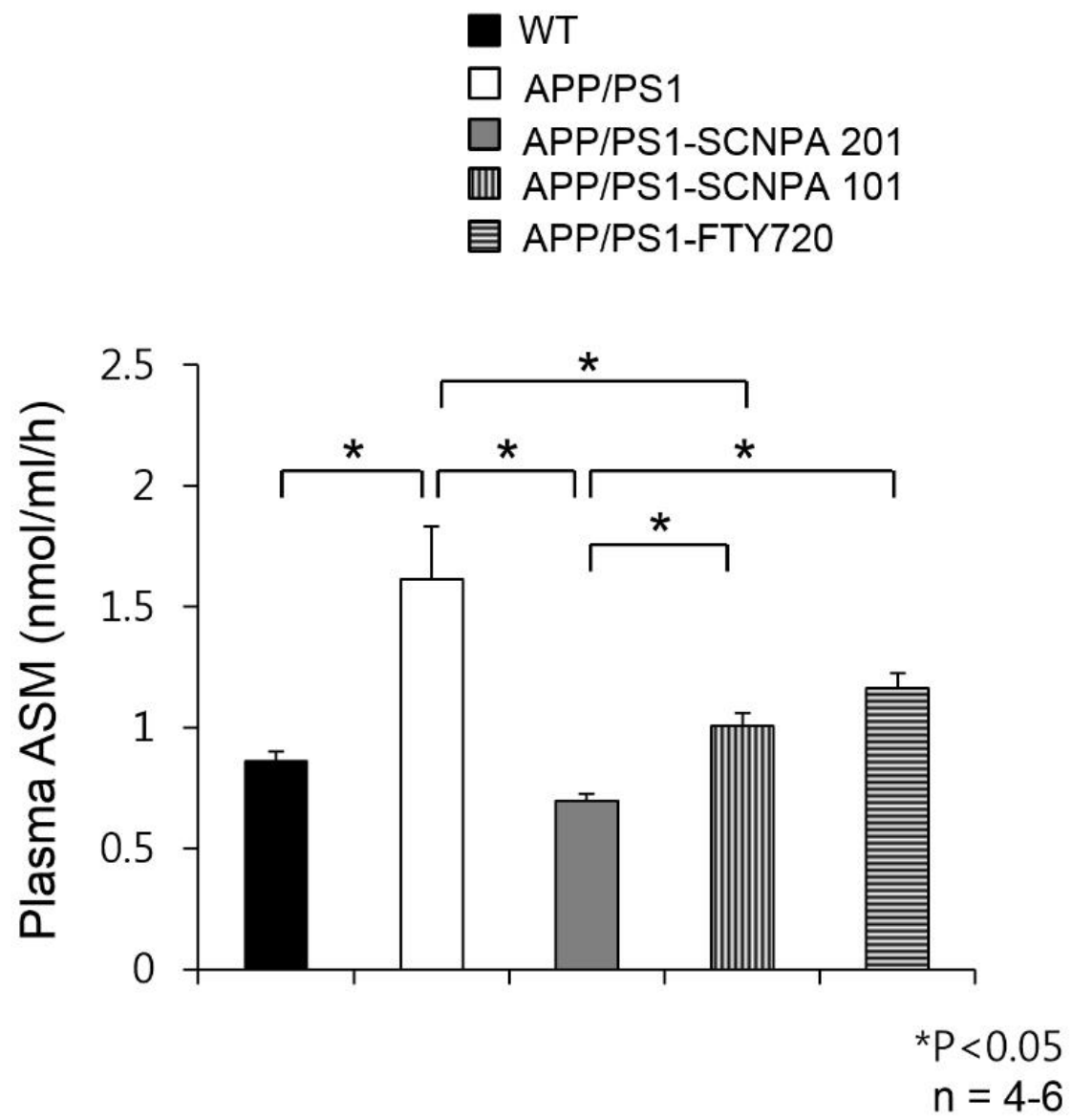


FIG. 9B

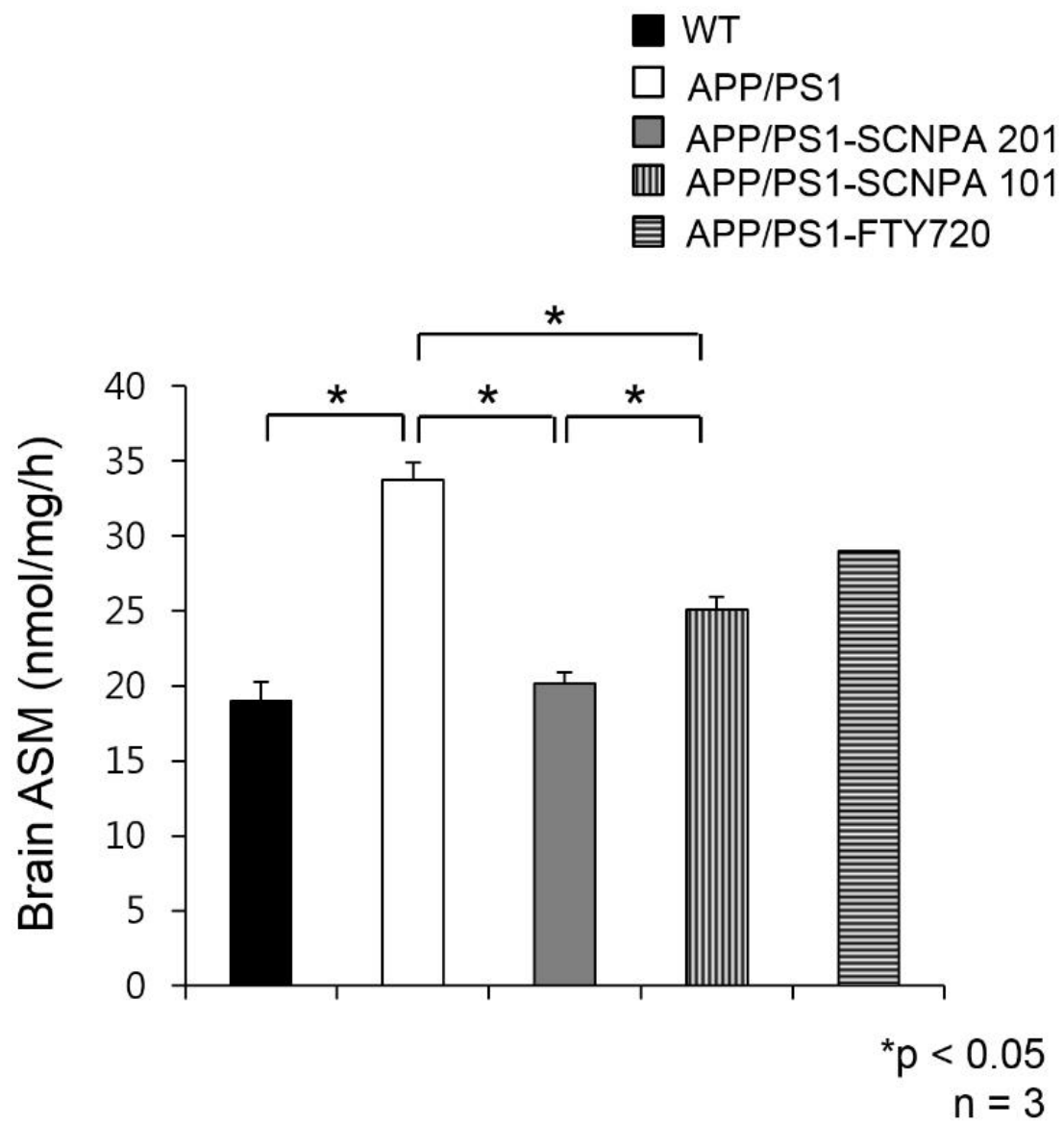


FIG. 10

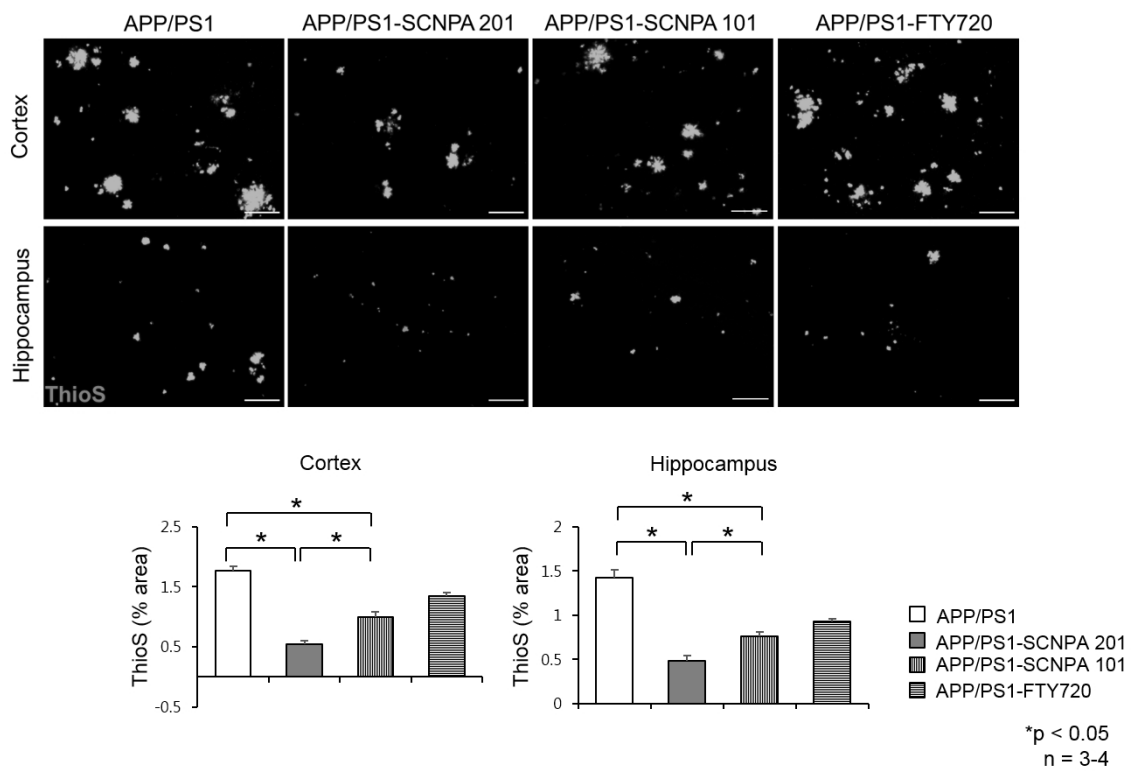


FIG. 11A

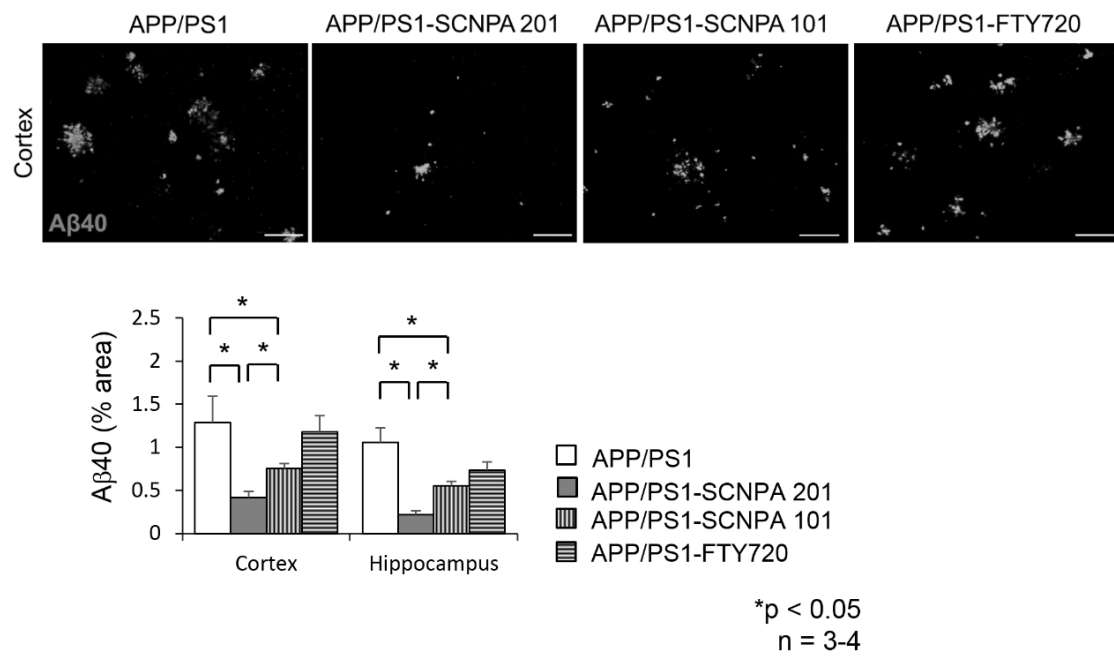


FIG. 11B

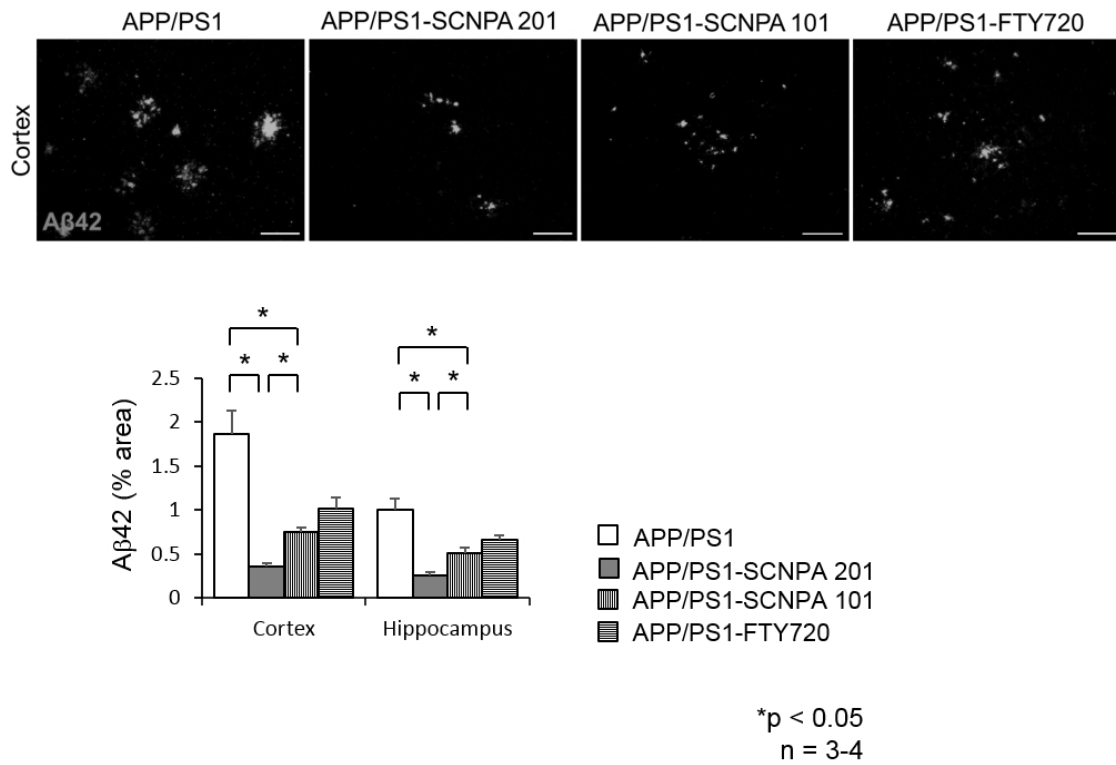


FIG. 12A

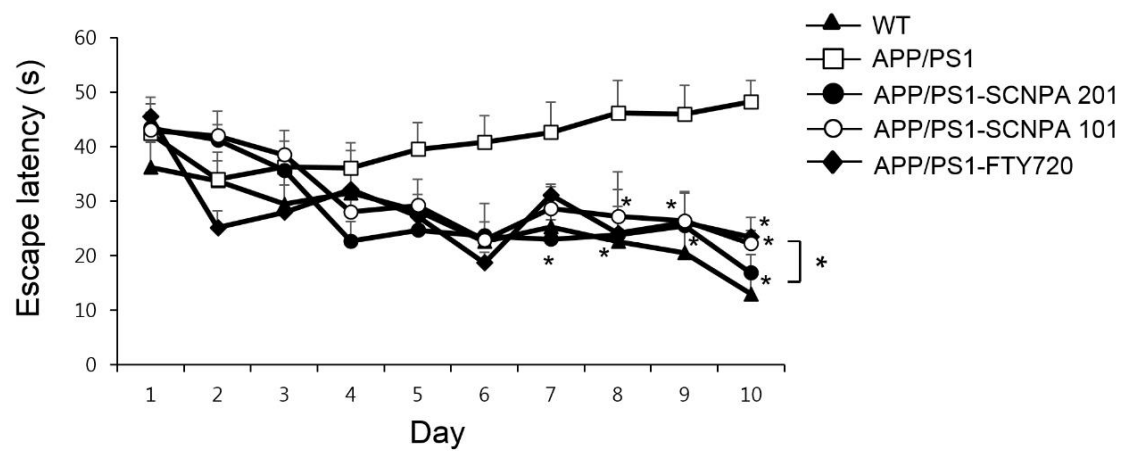


FIG. 12B

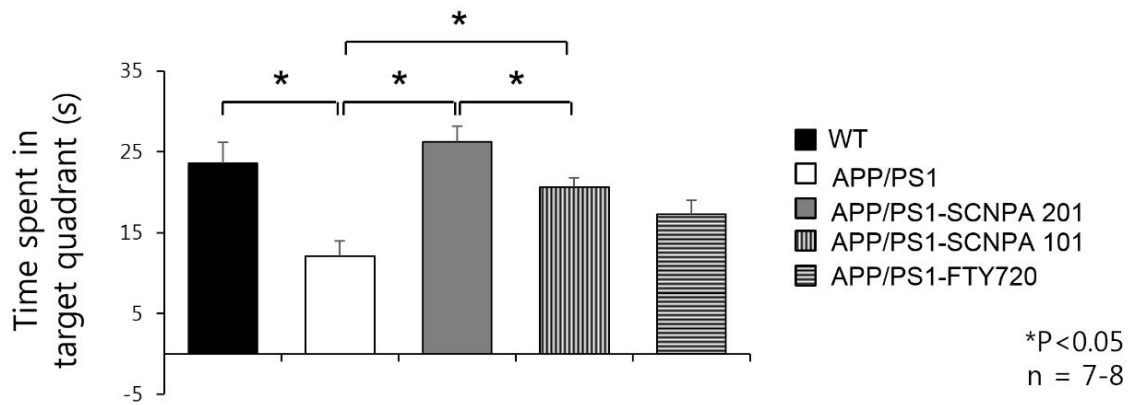


FIG. 12C

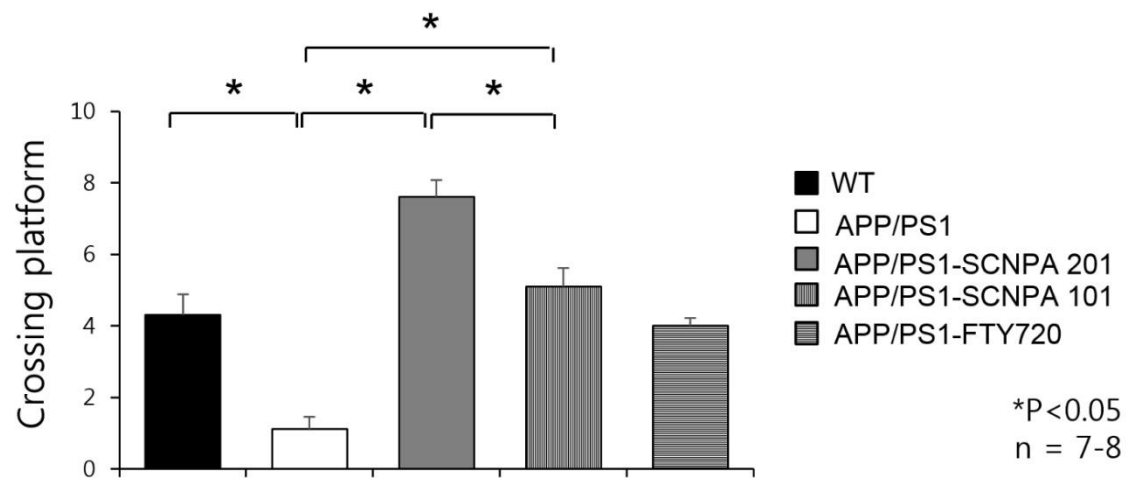


FIG. 13A

Open field

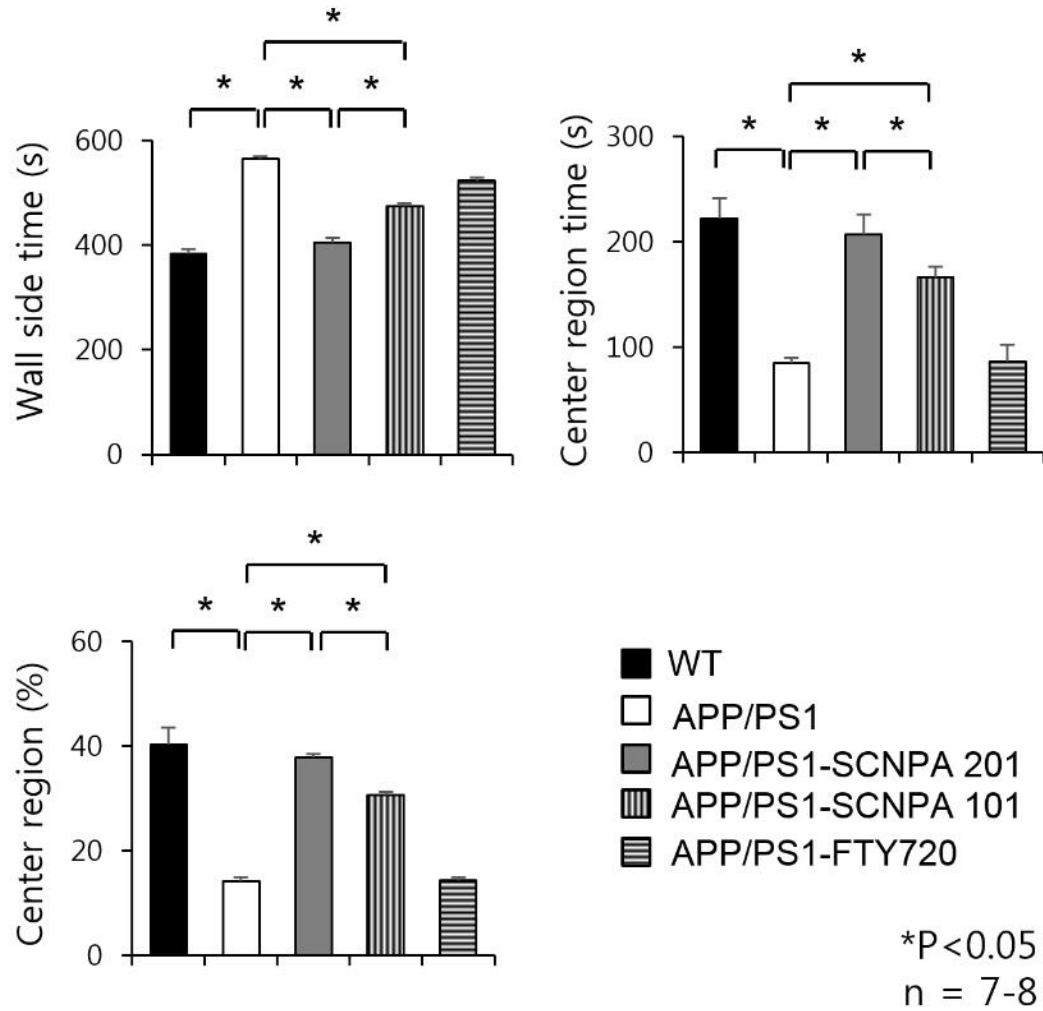


FIG. 13B

Dark & Light

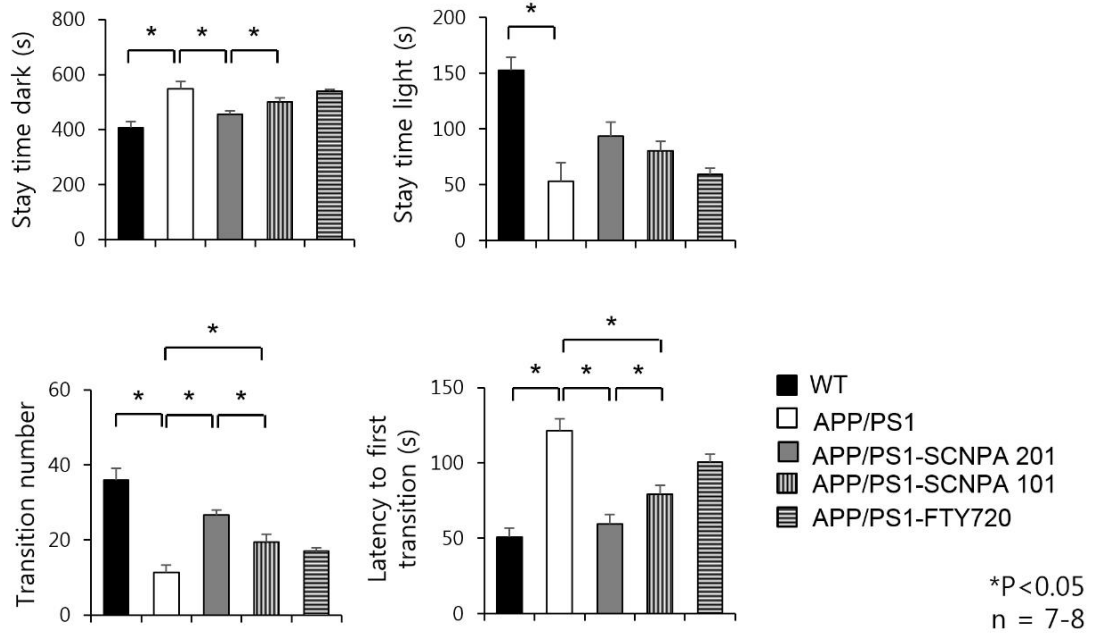


FIG. 14A

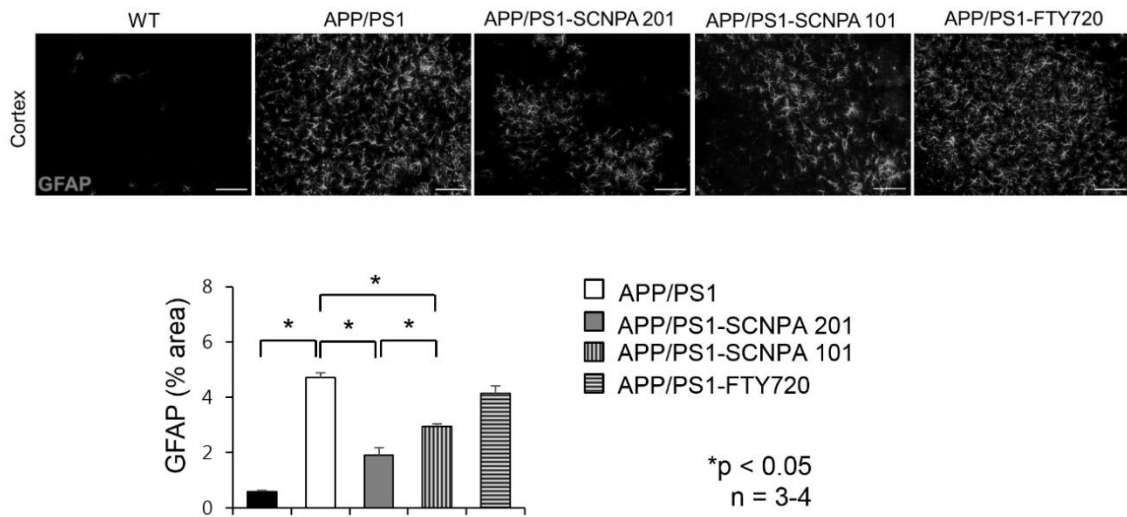


FIG. 14B

