

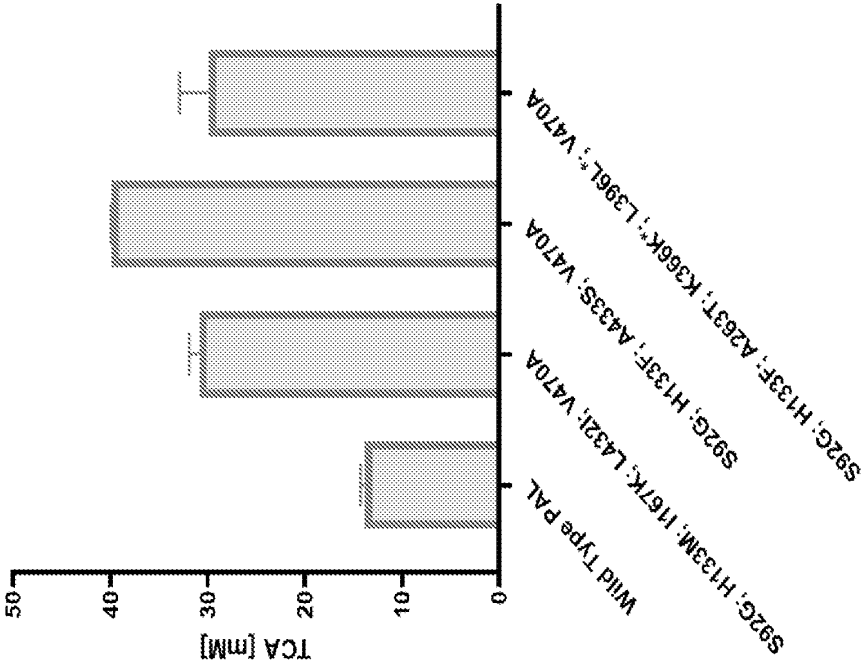


FIG. 1

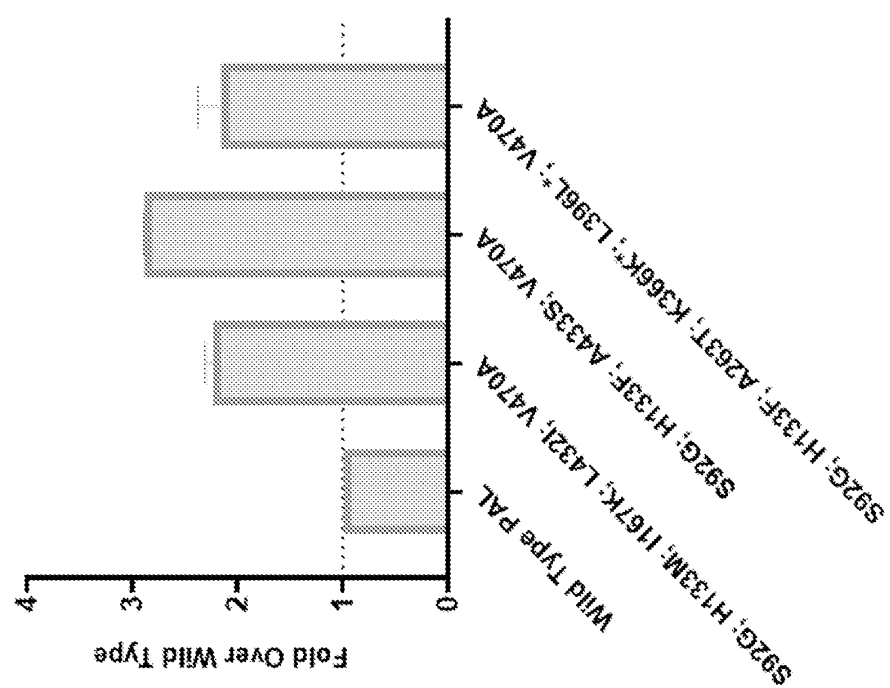


FIG. 2

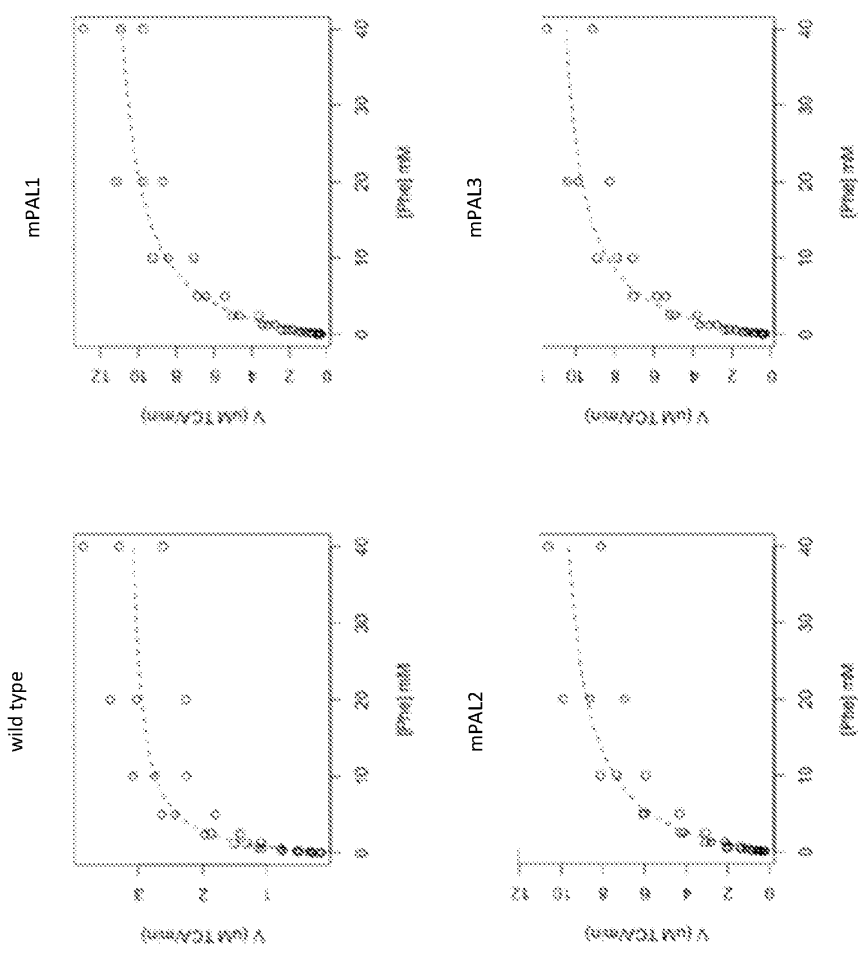


FIG. 3A

PAL Variant	V_{max} (μ mol TCA/min)	K_m (mM Phe)	Correlation
Wild Type	3.19	1.67	0.96
mPAL1	11.95	4.03	0.983
mPAL2	10.7	4.39	0.974
mPAL3	11.46	3.72	0.981

FIG. 3B

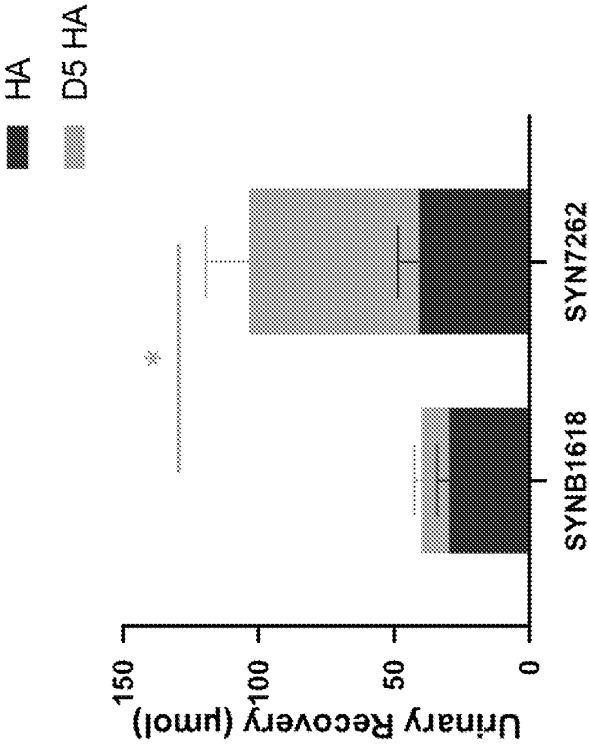


FIG. 4B

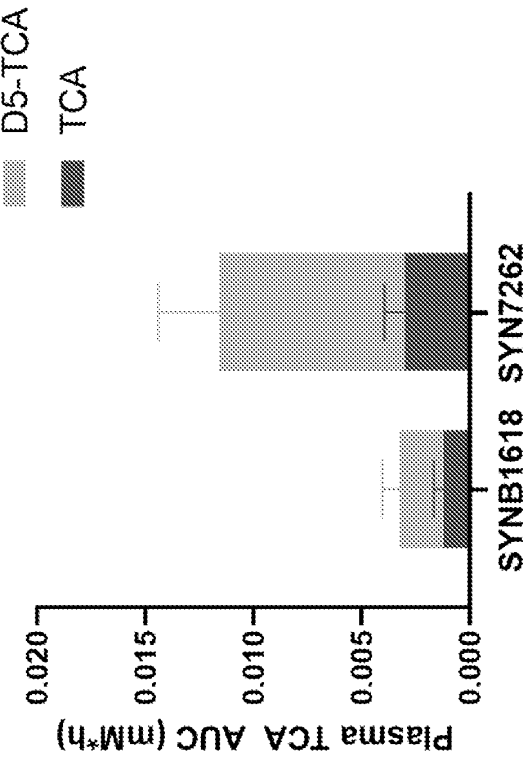


FIG. 4A

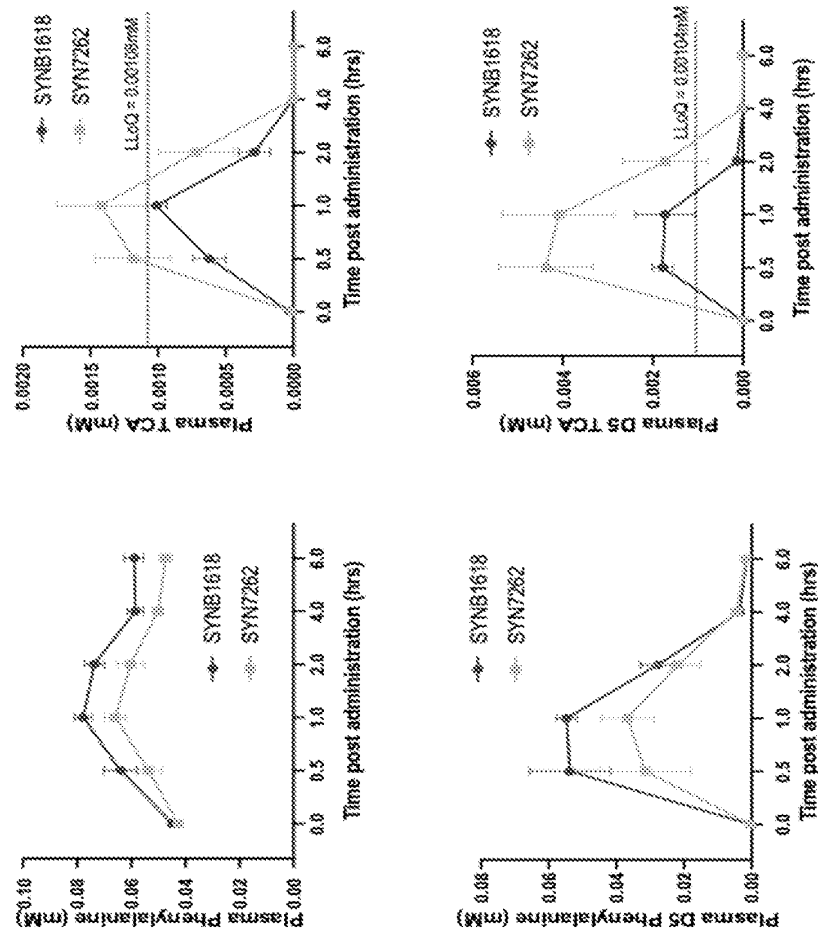


FIG. 4C

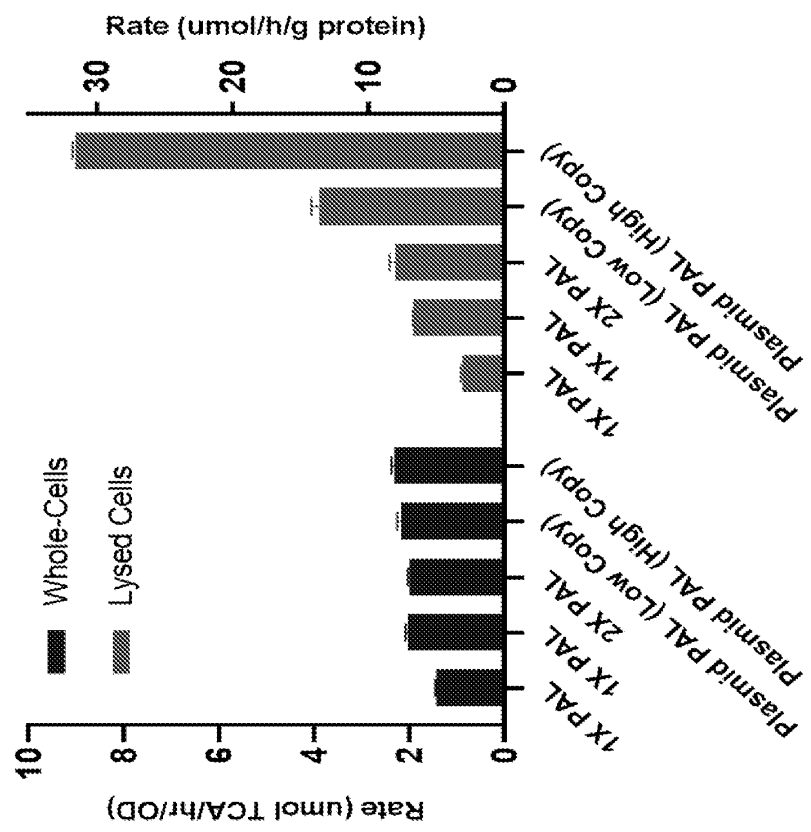


FIG. 5A

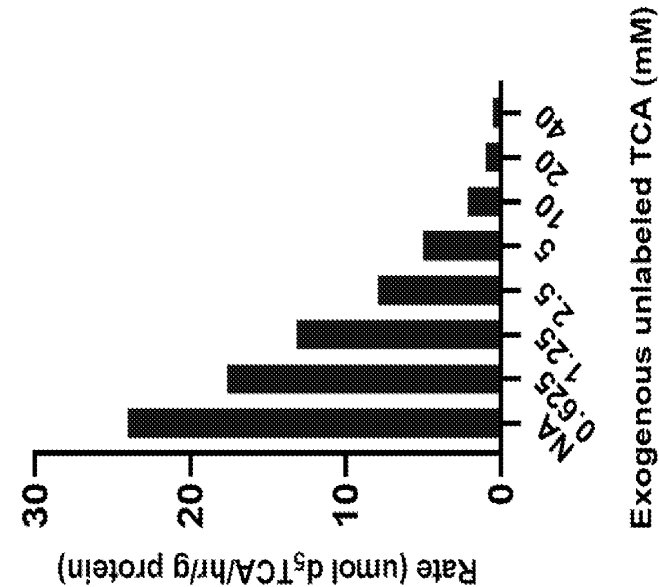


FIG. 5C

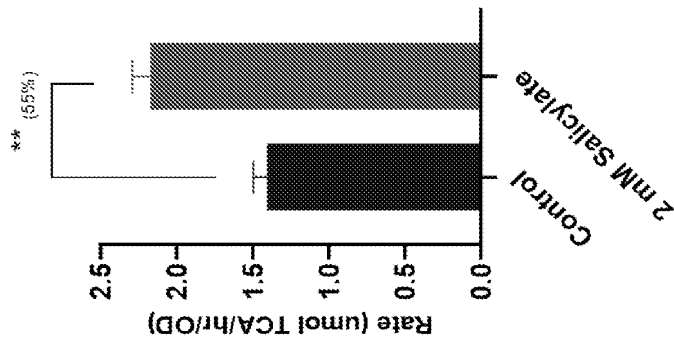


FIG. 5B