

Supplementary Information

Table S1: B_{max} values for [3 H]DAMGO using saturation radioligand binding in HEK-293 cells stably expressing mu, mu-kappa, and mu-delta opioid receptors.

Cell Type	B_{max} (fmol/mg)
mu	129.5 \pm 30.4
mu-kappa	104.4 \pm 25.7
mu-delta	141.1 \pm 34.4

Data shown as Mean \pm SEM (n = 3)

Table S2: Mean Dose ratios (ED50 of mu agonist in presence of naltrindole \div ED50 of mu agonist alone) and (95% confidence limits) for morphine, fentanyl, and methadone after pretreatment with the delta-opioid antagonist naltrindole in rhesus monkeys. *

Asterisk indicates that 95% confidence limits do not overlap compared to methadone within a naltrindole dose.

Naltrindole Dose	Morphine	Fentanyl	Methadone
0.1 mg/kg	0.96 (0.53 – 1.39)	1.08 (0.70 – 1.46)	Not Determined
0.32 mg/kg	1.65 (1.20 – 2.11)	1.56 (1.23 – 1.89)	1.21 (0.93 – 1.48)
1.0 mg/kg	2.22 (1.69 – 2.75) *	2.96 (1.79 – 4.12) *	1.25 (1.09 – 1.41)
3.2 mg/kg	5.88 (4.41 – 7.35) *	4.53 (2.86 – 6.19) *	2.44 (2.23 – 2.65)

