

## Supplementary information

**N-Methyl-D-Aspartate (NMDA) and cannabinoid CB<sub>2</sub> receptors form functional complexes in cells of the nervous system. Insights into the therapeutic potential of neuronal and microglial NMDA receptors.**

**Running title. Cannabinoid-NMDA receptor interactions**

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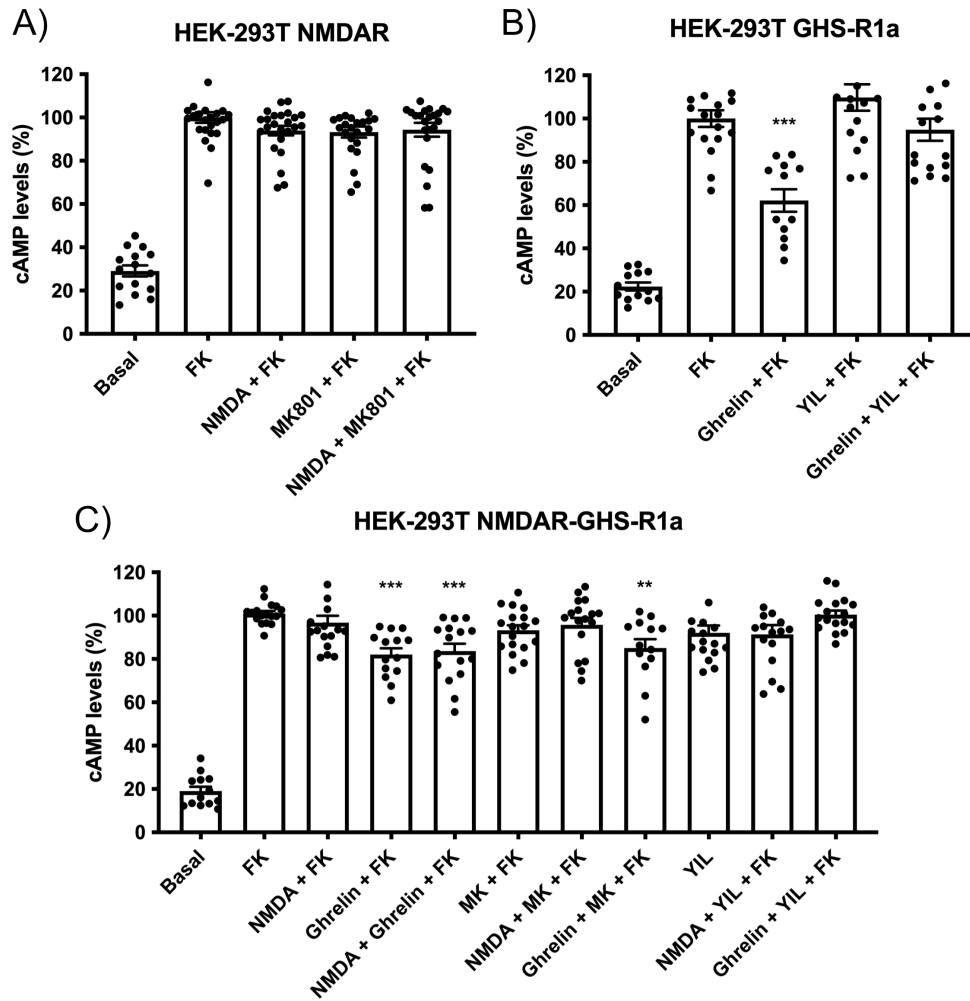
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**Supplementary figure 1. Signaling in HEK-293T cells expressing NMDA and GHSR1a receptors.** HEK-293T cells transfected with the cDNAs for two protomers of the NMDA receptor: GluN1 (1  $\mu$ g) and GluN2B (0.75  $\mu$ g) and/or with the cDNA for the GHS-R1a (1  $\mu$ g), were treated with selective agonists (15  $\mu$ M NMDA for NMDAR and/or 100 nM Ghrelin for GHS-R1a). When indicated cells were pretreated with selective receptor antagonists (1  $\mu$ M MK-801 for NMDA or 1  $\mu$ M YIL-781 for GHS-R1a). Panels A-C: Intracellular cAMP levels were determined by TR-FRET as described in Methods. As  $G_i$  coupling was assessed, decreases in cAMP levels were determined in cells previously treated with 0.5  $\mu$ M forskolin (15 min). Values are the mean  $\pm$  S.E.M. of 3 independent experiments performed in triplicates. ANOVA Summary: Panel A; F: 90.94,  $p < 0.001$ , Panel B; F: 52.09,  $p < 0.001$  and Panel C; F: 49.64,  $p < 0.001$ .