

Supplemental Figure 18

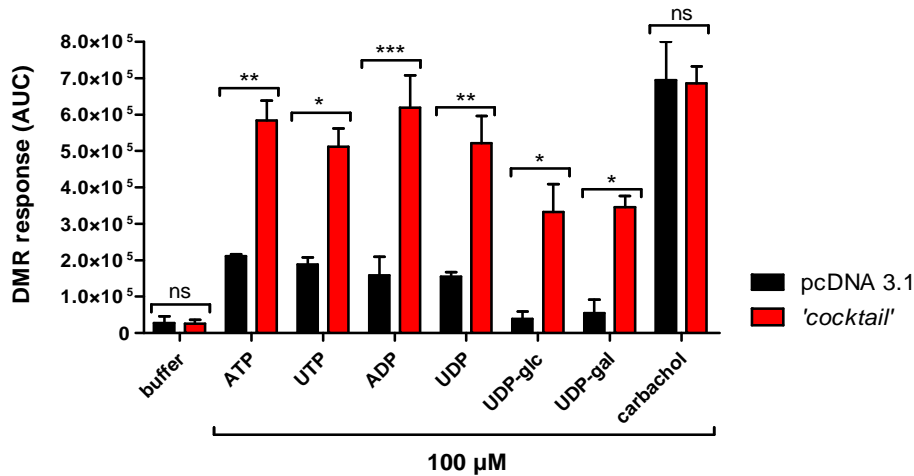


Fig. S18. Forced expression of a cocktail containing eight purinergic receptors enhances functional DMR responses to purinergic agonists in HEK293 cells. HEK293 cells transfected to express a cocktail of the purinergic receptors P2Y₁, P2Y₂, P2Y₄, P2Y₆, P2Y₁₁, P2Y₁₂, P2Y₁₃, P2Y₁₄, or pcDNA3.1(+) vector DNA as control were stimulated with the indicated concentrations of receptor agonists and DMR was recorded as a measure of receptor activity. ATP, UTP, and ADP activate P2Y_{1,2,4,11}, or P2Y_{2,4,6,11} or P2Y_{1,12,13}, respectively. UDP is an agonist for P2Y₆, while UDP-glucose (UDP-glc) and UDP-galactose (UDP-gal) stimulate P2Y₁₄. Enhanced functional responses to purinergic agonists is congruent with successful expression of P2Y receptor cDNAs. Shown are mean values + S.E.M. from 2-4 independent experiments, each performed in triplicate. Carbachol, an activator for the endogenously expressed muscarinic M₃ receptor, serves as control to indicate that viability of both vector and “cocktail-expressing” cells is virtually identical. Statistical significance was analyzed by two-way ANOVA with Bonferroni’s correction: ns $P > 0.05$, * $P < 0.05$, ** $P < 0.01$, and *** $P < 0.001$.