

**Table S1.** In vitro and in vivo data used in the study (expressed in the form of the pEC50 values).

<b>Compound/parameter</b>	<b>Gai2 activation</b>	<b>cAMP inhibition</b>	<b>bArr2 recruitment</b>	<b>Rab5 trafficking</b>	<b>GIRK activation</b>	<b>GRK2 recruitment</b>
PZM21	103	100	70	88	95	105
SR17018	98	97	28	75	88	66
Morphine	86	84	14	51	86	36
Fentanyl	61	62	12	59	78	41