

Data Sheet

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Product Name : PZM21

Cat. No. : PC-42356

CAS No. : 1997387-43-5

Molecular Formula : C₁₉H₂₇N₃O₂S

Molecular Weight : 361.50158

Target : Opioid Receptor

Solubility : 10 mM in DMSO

Biological Activity

PZM21 is a potent, selective Gi-biased μ -opioid-receptor (μ OR, MOR) agonist with Ki/EC50 of 1.1/4.6 nM, has little to no detectable κ OR/ δ OR agonist or nociceptin receptor agonist activity.

PZM21 is actually an κ OR antagonist (Ki=18 nM), 500- to 1,000-fold weaker activity for hERG and neurotransmitter transporters; also has no detectable β -arrestin-2 recruitment in the PathHunter assay.

Unlike morphine, PZM21 is more efficacious for the affective component of analgesia versus the reflexive component and is devoid of both respiratory depression and morphine-like reinforcing activity in mice.

References

Manglik A, et al. *Nature*. 2016 Sep 8;537(7619):185-190. Kostic M. *Cell Chem Biol*. 2016 Sep 22;23(9):1039-1040.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

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