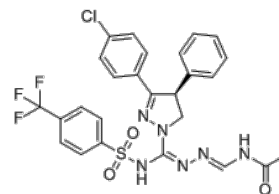


Product Name : MRI-1891
Cat. No. : PC-20170
CAS No. : 2712480-46-9
Molecular Formula : C₂₆H₂₂ClF₃N₆O₃S
Molecular Weight : 591.01
Target : Cannabinoid Receptor
Solubility : 10 mM in DMSO



Biological Activity

MRI-1891 (Monlunabant, INV-202) is potent, selective, β -Arrestin-2-biased peripheral **cannabinoid-1 receptor (CB1R)** antagonist with K_i of 0.3 nM (hCB1R), >2000-fold CB1R/CB2R selectivity.

MRI-1891 displays high bias toward inhibiting CB1R-agonist-induced β -arrestin-2 (β Arr2) recruitment (IC₅₀=21 pM) versus inhibiting CB1R-agonist-induced G protein activation, as monitored by GTP γ S binding (IC₅₀=6 nM).

In C2C12 myoblasts, CB1R activation suppresses insulin-induced akt-2 phosphorylation, preventable by MRI-1891

MRI-1891 improves obesity-induced muscle insulin resistance in wild-type but not in β Arr2-KO mice.

MRI-1891 augments glucose stimulated insulin secretion in isolated human pancreatic islets and mouse islets, shows comparable insulin secretion enhancing effect to exendin-4.

MRI-1891 treatment protects isolated human islet cells against cytokine-induced apoptosis, similar to exendin-4.

References

Ziyi Liu, et al. *ACS Pharmacol Transl Sci*. 2021 Apr 8;4(3):1175-1187.

Ghosh A, et al. *Eur J Pharmacol*. 2023 Apr 5;944:175589.

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

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