

Hello Bio, Inc.
304 Wall St., Princeton, NJ 08540 USA

T. 609-683-7500
F. 609-228-4994

customercare-usa@helloworldbio.com



DATASHEET

FCH-2996413 (Peripherally restricted HCAD DREADD actuator)

Product overview

Name	FCH-2996413 (Peripherally restricted HCAD DREADD actuator)
Cat No	HB13194
Biological action	Activator
Purity	>99%
Description	Novel, selective activator of the peripherally restricted HCAD DREADD. Does not cross the BBB.

Images



Biological Data

Biological description

Novel DREADD actuator for the first peripherally restricted DREADD system named the HCAD DREADD system. This system enables precise study of peripheral physiology without CNS interference.

Unlike other DREADD ligands (e.g. [CNO](#) & [DCZ](#)), FCH-2996413 does not cross the BBB so is able to selectively activate the peripherally restricted HCAD G_i-DREADD. To date, relatively few DREADD studies have been conducted in the PNS.

FCH-2996413 has excellent drug-like properties, peripherally restricted pharmacokinetics and clean off-target profiles. The HCAD system has been shown to selectively reduce pain in mice by targeting peripheral tissues of dorsal root ganglion (DRG). Active in vivo. FCH-2996413 is a racemic mixture which includes the racemates AR2599088 ('088) and AR259089 ('089).

Solubility & Handling

Storage instructions

-20°C

Solubility overview

Soluble in DMSO (100mM)

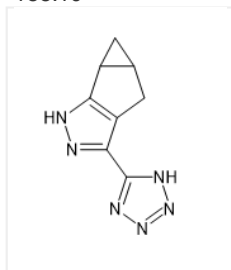
Important

This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not for human or veterinary use

Chemical Data

Chemical name
Molecular Weight
Chemical structure

rac-(2R,4R)-7-(1H-1,2,3,4-tetrazol-5-yl)-8,9-diazatricyclo[4.3.0.0,2,4]nona-1(6),7-diene
188.19



Molecular Formula
CAS Number
SMILES
InChi

C₈H₈N₆
1229028-63-0
C1C2CC3=C(NN=C3C3=NN=NN3)C12
InChI=1/C8H8N6/c1-3-2-5-6(4(1)3)9-10-7(5)8-11-13-14-12-8/h3-4H,1-2H2,(H,9,10)(H,11,12,13,14)

References

Structure-guided design of a peripherally restricted chemogenetic system.

Kang HJ et al (2024) Cell

PubMedID

[39631393](#)
