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DATASHEET

FCH-2296413 sodium (Peripherally restricted HCAD DREADD actuator) [Water Soluble]

Product overview

Name	FCH-2296413 sodium (Peripherally restricted HCAD DREADD actuator) [Water Soluble]
Cat No	HB10013
Biological action	Activator
Purity	>98%
Description	Novel, selective activator of the peripherally restricted HCAD DREADD. Does not cross the BBB. Water soluble.

Biological Data

Biological description

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

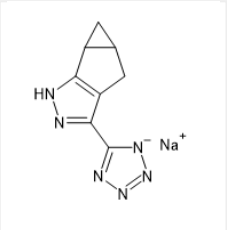
FCH-2296413 does not cross the BBB (unlike other DREADD ligands (e.g. CNO & DCZ)), so can selectively activate the novel, peripherally restricted HCAD G_i-DREADD. Few DREADD studies have been conducted in the PNS to date.

FCH-2296413 has excellent drug-like properties, peripherally restricted pharmacokinetics and clean off-target profiles. The HCAD system also selectively reduces pain in mice by targeting peripheral tissues of DRG (dorsal root ganglion). Active *in-vivo*. FCH-2296413 is a racemic mixture which includes the racemates AR2599088 ('088) and AR259089 ('089).

Solubility & Handling

Storage instructions	-20°C
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	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, sodium salt
Molecular Weight	210.17
Chemical structure	
Molecular Formula	$C_8H_7N_6Na$

SMILES	[Na+].[H][C@@]12C[C@]1([H])C1=C(C2)C(=NN1)C1=NN=N[N-]1
Source	Synthetic
InChi	InChI=1/C8H7N6.Na/c1-3-2-5-6(4(1)3)9-10-7(5)8-11-13-14-12-8;/h3-4H,1-2H2,(H-,9,10,11,12,13,14);/q-1;+1/t3-,4-;/s2
Appearance	white solid

References

Structure-guided design of a peripherally restricted chemogenetic system.

Kang HJ et al (2024) Cell 187

PubMedID 39631393/