

DATASHEET

FCH-2996413 sodium (Peripherally restricted HCAD DREADD actuator) [Water Soluble]

Product overview

Name	FCH-2996413 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.

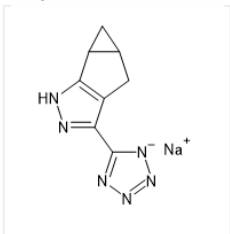
Biological Data

Biological description	<p>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.</p> <p>FCH-2996413 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.</p> <p>FCH-2996413 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-2996413 is a racemic mixture which includes the racemates AR2599088 ('088) and AR259089 ('089).</p>
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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 ₈ H ₇ N ₆ Na
SMILES	[Na+].[H][C@@]12C[C@]1([H])C1=C(C2)C(=NN)C1=NN=[N-]
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

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