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DATASHEET

Salvinorin B (SALB)

Product overview

Name	Salvinorin B (SALB)
Cat No	HB4887
Alternative names	SALB, Divinorin B
Biological action	Activator
Purity	>98%
Customer comments	*High quality with better price. I have compared SalB (Salvinorin B)) from different producer, Hello Bio really provide a high quality compound with a cheaper price. Would definitely order again from here.* **Verified customer, Stony Brook University**
Description	Potent, selective KORD DREADD activator

Biological Data

Biological description

Salvinorin B (SALB) is a pharmacologically inert ligand that potently and selectively activates the KORD (the κ-opioid designer receptor (DREADD)) (EC_{50} = 11.8 nM).

Salvinorin B (SALB) is ~100-fold selective for the KORD DREADD over human κ opioid receptor and other targets and shows good CNS penetrability.

Activation of KORD by Salvinorin B (SALB) induces neuronal inhibition and modifies behaviour in vivo.

Salvinorin B (SALB) can be used in mice also expressing Clozapine N-Oxide (CNO) responsive DREADDS, to allow bi-directional manipulation of neural circuits.

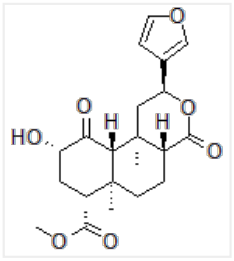
CNO dihydrochloride (water soluble), Clozapine N-oxide (CNO) freebase, Compound 21 and perlapine freebase also available.

Please note this item is not for sale in Canada

Solubility & Handling

Storage instructions	-20°C
Solubility overview	Soluble in DMSO (20 mM)
Handling	• This compound is light sensitive; we therefore recommend protecting the solid and solutions from exposure to light. • Salvinorin B (SalB) is unstable in solution and we recommend that solutions are stored at -20°C and used within 24 hours.
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	(2S,4aR,6aR,7R,9S,10aS,10bR)-2-(3-Furanyl)dodecahydro-9-hydroxy-6a,10b-dimethyl-4,10-dioxo-2H-naphtho[2,1-c]pyran-7-carboxylic acid methyl ester
Molecular Weight	390.43
Chemical structure	
Molecular Formula	$C_{21}H_{26}O_7$
CAS Number	92545-30-7
PubChem identifier	11440685
SMILES	C[C@@]12CC[C@H]3C(=O)O[C@@H](C[C@@]3([C@H]1C(=O)[C@H](C[C@H]2C(=O)OC)O)C)C4=COC=C4
Source	Extracted from salvia divinorum
InChi	InChI=1S/C21H26O7/c1-20-6-4-12-19(25)28-15(11-5-7-27-10-11)9-21(12,2)17(20)16(23)14(22)8-13(20)18(24)26-3/h5,7,10,12-15,17,22H,4,6,8-9H2,1-3H3/t12-,13-,14-,15-,17-,20-,21-/m0/s1
InChiKey	BLTMVAIOAAGYAR-CEFSSPBYSA-N
MDL number	MFCD16036232
Appearance	Off-white solid

References

A New DREADD Facilitates the Multiplexed Chemogenetic Interrogation of Behavior.

Vardy et al (2015) Neuron. 86(4)
PubMedID 25937170

DREADDS: Use and application in behavioral neuroscience.

Smith et al (206) Behav Neurosci 130(2)
PubMedID 26913540

Behavioral and Physiological Effects of a Novel Kappa-Opioid Receptor-Based DREADD in Rats.

Marchant et al (2016) Neuropsychopharmacology 41(2)
PubMedID 26019014

Antinociceptive and hypothermic effects of Salvinorin A are abolished in a novel strain of kappa-opioid receptor-1 knockout mice.

Ansonoff MA et al (2006) J Pharmacol Exp Ther 318 (2):
PubMedID 16672569

DREADDs: The Power of the Lock, the Weakness of the Key. Favoring the Pursuit of Specific Conditions Rather than Specific Ligands.

Goutaudier et al (2019) eNeuro 6
PubMedID 31562177