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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  $\kappa$ -opioid designer receptor (DREADD)) (EC<sub>50</sub> = 11.8 nM).

Salvinorin B (SALB) is  $\sim$ 100-fold selective for the KORD DREADD over human  $\kappa$  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 Solubility overview Handling -20°C

Soluble in DMSO (20 mM)

- 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

но.

4=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)8-1

3(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 numberMFCD16036232AppearanceOff-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