

PRODUCT INFORMATION



Salvinorin A Propionate

Item No. 22290

CAS Registry No.: 689295-71-4
Formal Name: (2S,4aR,6aR,7R,9S,10aS,10bR)-2-(3-furanyl)dodecahydro-6a,10b-dimethyl-4,10-dioxo-9-(1-oxopropoxy)-2H-naphtho[2,1-c]pyran-7-carboxylic acid, methyl ester

Synonyms: Divinorin A Propionate, Sal A Propionate, Sal-2-propionate, Salvinorinyl-2-propionate

MF: C₂₄H₃₀O₈

FW: 446.5

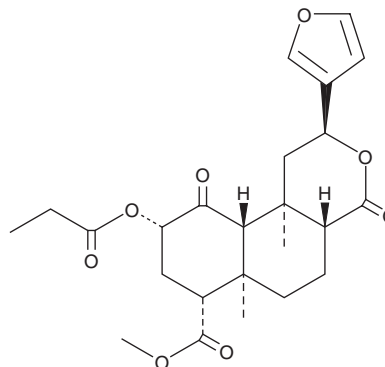
Purity: ≥98%

UV/Vis.: λ_{max}: 211, 258, 273 nm

Supplied as: A crystalline solid

Storage: -20°C

Stability: ≥2 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Salvinorin A propionate is supplied as a crystalline solid. A stock solution may be made by dissolving the salvinorin A propionate in the solvent of choice, which should be purged with an inert gas. Salvinorin A propionate is soluble in organic solvents such as acetonitrile, DMSO, and dimethyl formamide (DMF). The solubility of salvinorin A propionate in acetonitrile and DMSO is approximately 1 mg/ml and approximately 2 mg/ml in DMF.

Salvinorin A propionate is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, salvinorin A propionate should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Salvinorin A propionate has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Salvinorin A propionate is a selective partial agonist at κ₁-opioid receptors (KOR) with a K_i value of 32.6 nM.¹ It inhibits adenylate cyclase (EC₅₀ = 4.7 nM) in HEK293 cells transfected with human KOR.² It is selective for KORs over μ, δ, and ORL-1 opioid receptors and has no effect at serotonin, dopamine, muscarinic, or adrenergic receptors. In mice, salvinorin A propionate (13 μg, i.c.v.) reduces nociceptive responses in a radiant heat tail-flick assay, though not as potently as salvinorin A (Item No. 11487).¹

References

1. Ansonoff, M.A., Zhang, J., Czyzk, T., *et al.* Antinociceptive and hypothermic effects of salvinorin A are abolished in a novel strain of κ-opioid receptor-1 knockout mice. *J. Pharmacol. Exp. Ther.* **318**(2), 318(2) (2006).
2. Chavkin, C., Sud, S., Jin, W., *et al.* Salvinorin A, an active component of the hallucinogenic sage *Salvia divinorum* is a highly efficacious κ-opioid receptor agonist: Structural and functional considerations. *J. Pharmacol. Exp. Ther.* **308**(3), 1197-1203 (2004).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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