

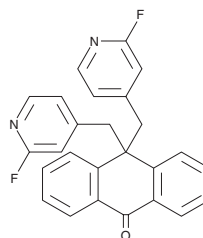
PRODUCT INFORMATION



DMP 543

Item No. 32849

CAS Registry No.: 160588-45-4
Formal Name: 10,10-bis[(2-fluoro-4-pyridinyl)methyl]-9(10H)-anthracenone
MF: C₂₆H₁₈F₂N₂O
FW: 412.4
Purity: ≥98%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

DMP 543 is supplied as a solid. A stock solution may be made by dissolving the DMP 543 in the solvent of choice, which should be purged with an inert gas. DMP 543 is soluble in the organic solvent DMSO at a concentration of approximately 30 mg/ml.

Description

DMP 543 is an inhibitor of the voltage-gated potassium channel K_v7.2 (IC₅₀ = 0.048 μM) and a derivative of linopirdine (Item No. 19547).^{1,2} It enhances potassium-induced acetylcholine (ACh) release in rat hippocampal slices (EC₅₀ = 0.83 μM).² DMP 543 (1 mg/kg) increases hippocampal extracellular ACh levels in rats.

References

1. Porter, J.D., Vivas, O., Weaver, C.D., *et al.* An anthrone-based Kv7.2/7.3 channel blocker with improved properties for the investigation of psychiatric and neurodegenerative disorders. *Bioorg. Med. Chem. Lett.* **29(23)**, 126681 (2019).
2. Zaczek, R., Chorvat, R.J., Saye, J.A., *et al.* Two new potent neurotransmitter release enhancers, 10,10-bis(4-pyridinylmethyl)-9(10H)-anthracenone and 10,10-bis(2-fluoro-4-pyridinylmethyl)-9(10H)-anthracenone: Comparison to linopirdine. *J. Pharmacol. Exp. Ther.* **285(2)**, 724-730 (1998).

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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