

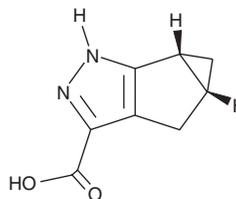
PRODUCT INFORMATION



MK-1903

Item No. 34304

CAS Registry No.: 1268882-43-4
Formal Name: 4,4aR,5,5aR-tetrahydro-1H-cyclopropa[4,5]cyclopenta[1,2-c]pyrazole-3-carboxylic acid
MF: C₈H₈N₂O₂
FW: 164.2
Purity: ≥98%
UV/Vis.: λ_{max}: 229, 258 nm
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

MK-1903 is supplied as a solid. A stock solution may be made by dissolving the MK-1903 in the solvent of choice, which should be purged with an inert gas. MK-1903 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of MK-1903 in these solvents is approximately 20, 30, and 25 mg/ml, respectively.

MK-1903 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, MK-1903 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. MK-1903 has a solubility of approximately 0.3 mg/ml in a 1:2 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

MK-1903 is an agonist of hydroxycarboxylic acid receptor 2 (HCA₂), known previously as G protein-coupled receptor 109A (GPR109A).¹ It reduces forskolin-induced cAMP production in a homogenous time-resolved fluorescence (HTRF) assay using CHO cells expressing the human receptor (EC₅₀ = 12.9 nM). MK-1903 is selective for HCA₂ over a panel of G protein-coupled receptors (GPCRs) and ion channels (IC₅₀s = >10 μM for all). It reduces plasma free fatty acid levels in fasted rats when administered at doses ranging from 0.001 to 100 mg/kg.

Reference

1. Boatman, P.D., Lauring, B., Schrader, T.O., *et al.* (1aR,5aR)1a,3,5,5a-Tetrahydro-1H-2,3-diaza-cyclopropa[a]pentalene-4-carboxylic acid (MK-1903): A potent GPR109a agonist that lowers free fatty acids in humans. *J. Med. Chem.* **55**(8), 3644-3666 (2012).

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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