

Product Name: MK 1903

Catalog No.: 4622

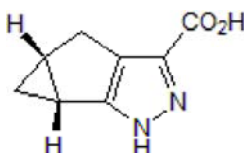
Batch No.: 3

CAS Number: 1268882-43-4

IUPAC Name: (4a*R*,5a*R*)-4,4a,5,5a-Tetrahydro-1*H*-cyclopropa[4,5]cyclopenta[1,2]pyrazole-3-carboxylic acid

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₈H₈N₂O₂
Batch Molecular Weight: 164.16
Physical Appearance: Off White solid
Solubility: DMSO to 100 mM
 ethanol to 50 mM
Storage: Store at +4°C
Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 99.6% purity
Chiral HPLC: Shows 100.0% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure
Optical Rotation: [α]_D = +40.8 (Concentration = 1, Solvent = Methanol)
Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	58.53	4.91	17.06
Found	58.38	4.97	17.01

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

bio-techne.com

info@bio-techne.com

techsupport@bio-techne.com

North America

Tel: (800) 343 7475

China

info.cn@bio-techne.com

Tel: +86 (21) 52380373

Europe Middle East Africa

Tel: +44 (0)1235 529449

Rest of World

www.tocris.com/distributors

Tel: +1 612 379 2956

Product Name: MK 1903

Catalog No.: 4622

3

CAS Number: 1268882-43-4

IUPAC Name: (4a*R*,5a*R*)-4,4a,5,5a-Tetrahydro-1*H*-cyclopropa[4,5]cyclopenta[1,2]pyrazole-3-carboxylic acid

Description:

MK 1903 is a potent and selective hydroxycarboxylic acid receptor 2 (HCA₂, GPR109A) full agonist; exhibits greater potency than niacin in a whole cell HTRF-cAMP assay (EC₅₀ values are 12.9 and 51 nM respectively). Exhibits no binding at the GRP109B receptor.

Physical and Chemical Properties:

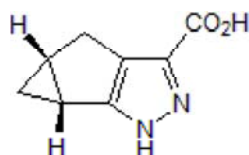
Batch Molecular Formula: C₈H₈N₂O₂

Batch Molecular Weight: 164.16

Physical Appearance: Off White solid

Minimum Purity: ≥98%

Batch Molecular Structure:



References:

Boatman (2012) (1a*R*,5a*R*)1a,3,5,5a-Tetrahydro-1*H*-2,3-diaza-cyclopropa[α]pentalene-4-carboxylic acid (MK-1903): a potent GPR109a agonist that lowers free fatty acids in humans. *J.Med.Chem.* **55** 3644. PMID: 22435740.

Lauring (2012) Niacin lipid efficacy is independent of both the niacin receptor GPR109A and free fatty acid suppression. *Sci.Transl.Med.* **4** 148ra115. PMID: 22914621.

Storage: Store at +4°C

Solubility & Usage Info:

DMSO to 100 mM

ethanol to 50 mM

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

bio-techne.com

info@bio-techne.com

techsupport@bio-techne.com

North America

Tel: (800) 343 7475

China

info.cn@bio-techne.com

Tel: +86 (21) 52380373

Europe Middle East Africa

Tel: +44 (0)1235 529449

Rest of World

www.tocris.com/distributors

Tel:+1 612 379 2956