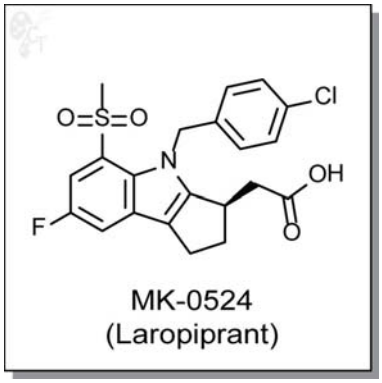
Product Specification Sheet

Product Name: MK-0524 (Laropiprant)

Catalog Number: C6052



MK-0524
(Laropiprant)

Technical information:

Chemical Formula:	$C_{21}H_{19}ClFNO_4S$
CAS #:	571170-77-9
Molecular Weight:	435.9
Purity:	> 98%
Appearance:	White solid
Solubility:	Soluble in DMSO up to 50 mM
Chemical Name:	[(3R)-4-(4-chloro-benzyl)-7-fluoro-5-(methylsulfonyl)-1,2,3,4-tetrahydrocyclopenta[b]indol-3-yl]-acetic acid
Storage:	Store solid powder at 4°C desiccated; Store DMSO solution at -20°C.
Shelf Life:	In the unopened package, powder is stable for 1 year and DMSO solution is stable for 6 months under proper storage condition.

Handling:

- To make 10 mM stock solution, add 0.229mL of DMSO for each mg of MK-0524 (Laropiprant).
- For DMSO solution, briefly spin the vial at 500 rpm in a 50 mL conical tube to ensure maximum sample recovery.

Biological Activity:

MK0524, a fused indole-based antagonist of prostaglandin D2 (DP), has a Ki binding affinity of 0.57 nM and a Kd dissociation constant of 0.03 nM. With the exception of the TxA2 receptor (Ki = 2.95 nM), MK0524 has excellent selectivity over a number of other prostanoid receptors (EP family, FP, and IP). In a functional activity assay in platelet-rich plasma and washed platelets, MK0524 had an IC50 of 0.09 nM. [1]

MK-0524 has been shown to block nicotinic acid-induced cutaneous vasodilation and also antagonizes prostaglandin D1 (DP1) in a mouse DP1 functional assay at an IC50 of 1.1 nM. [2]

Reference:

1. Sturino et al., Discovery of a Potent and Selective Prostaglandin D2 Receptor Antagonist, [(3R)-4-(4-Chlorobenzyl)-7-fluoro-5-(methylsulfonyl)-1,2,3,4-tetrahydrocyclopenta[b]indol-3-yl]-acetic Acid (MK-0524). J. Med. Chem. 2007, 50, 794-806. Pubmed ID: 17300164
2. Cheng et al., Antagonism of the prostaglandin D2 receptor 1 suppresses nicotinic acid-induced vasodilation in mice and humans. Proc. Natl. Acad. Sci. 2006, 103(17), 6682-6687. Pubmed ID: 16617107

To reorder: http://www.cellagentech.com/MK-0524-Laropiprant/

For Technical Support: technical@cellagentech.com

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