

**Product Name:** Laropiprant

**Catalog No.:** 7343

**Batch No.:** 1

CAS Number: 571170-77-9

IUPAC Name: (3*R*)-4-[4-Chlorophenyl)methyl]-7-fluoro-1,2,3,4-tetrahydro-5-(methylsulfonyl)cyclopent[*b*]indole-3-acetic acid

**1. PHYSICAL AND CHEMICAL PROPERTIES**

**Batch Molecular Formula:** C<sub>21</sub>H<sub>19</sub>ClFNO<sub>4</sub>S.

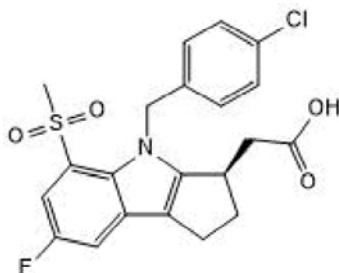
**Batch Molecular Weight:** 435.9

**Physical Appearance:** White solid

**Solubility:** DMSO to 100 mM  
ethanol to 50 mM

**Storage:** Store at -20°C

**Batch Molecular Structure:**



**2. ANALYTICAL DATA**

**HPLC:** Shows 99.9% purity

**<sup>1</sup>H NMR:** Consistent with structure

**Mass Spectrum:** Consistent with structure

**Optical Rotation:** [α]<sub>D</sub> = -24.1 (Concentration = 1, Solvent = Methanol)

**Microanalysis:**

	Carbon Hydrogen Nitrogen		
Theoretical	57.86	4.39	3.21
Found	57.91	4.36	3.16

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:** Laropiprant

**Catalog No.:** 7343

**1**

CAS Number: 571170-77-9

IUPAC Name: (3R)-4-[(4-Chlorophenyl)methyl]-7-fluoro-1,2,3,4-tetrahydro-5-(methylsulfonyl)cyclopent[*b*]indole-3-acetic acid

**Description:**

Laropiprant is a potent and selective prostaglandin D<sub>2</sub> receptor antagonist (IC<sub>50</sub> = 0.09 nM in washed platelets; K<sub>i</sub> = 0.57). It exhibits selectivity for binding to PGD<sub>2</sub> receptors over other prostanoid receptors (K<sub>i</sub> values are ≥ 2.95 nM for TP, EP<sub>1</sub>, EP<sub>2</sub>, EP<sub>3</sub>, EP<sub>4</sub>, FP and IP). Laropiprant promotes coagulation of whole blood ex vivo and reduces bleeding time in mice in vivo. In a mouse model of intracerebral hemorrhage, Laropiprant reduces lesion volume and attenuates neurological deficit scores. The compound also reduces Niacin (Cat. No. 4106) induced vasodilation. Please see product specific page on www.tocris.com for full description.

**Physical and Chemical Properties:**

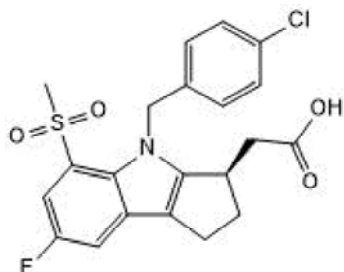
Batch Molecular Formula: C<sub>21</sub>H<sub>19</sub>ClFNO<sub>4</sub>S.

Batch Molecular Weight: 435.9

Physical Appearance: White solid

**Minimum Purity:** ≥98%

**Batch Molecular Structure:**



**References:**

**Ahmad et al** (2017) Efficacy of Laropiprant in minimizing brain injury following experimental intracerebral hemorrhage. *Sci.Rep.* **7** 9489. PMID: 28842638.

**Kong et al** (2017) Niacin promotes cardiac healing after myocardial infarction through activation of the myeloid prostaglandin D<sub>2</sub> receptor subtype 1. *J.Pharmacol.Exp.Ther.* **360** 435. PMID: 28057839.

**Sturino et al** (2007) Discovery of a potent and selective prostaglandin D<sub>2</sub> receptor antagonist, [(3R)-4-(4-chloro-benzyl)-7-fluoro-5-(methylsulfonyl)-1,2,3,4-tetrahydrocyclopenta[*b*]indol-3-yl]-acetic acid (MK-0524). *J.Med.Chem.* **50** 794. PMID: 17300164.

**Storage:** Store at -20°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