

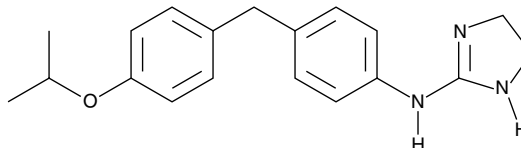
# Product Information



**CAY10441**

Item No. 10005186

**CAS Registry No.:** 221529-58-4  
**Formal Name:** 4,5-dihydro-N-[4-[[4-(1-methylethoxy)phenyl]methyl]phenyl]-1H-imidazol-2-amine  
**Synonym:** RO1138452  
**MF:** C<sub>19</sub>H<sub>23</sub>N<sub>3</sub>O  
**FW:** 309.4  
**Purity:** ≥98%  
**Stability:** ≥2 years at -20°C  
**Supplied as:** A crystalline solid  
**UV/Vis.:** λ<sub>max</sub>: 232 nm



## Laboratory Procedures

For long term storage, we suggest that CAY10441 be stored as supplied at -20°C. It should be stable for at least two years.

CAY10441 is supplied as a crystalline solid. A stock solution may be made by dissolving the CAY10441 in an organic solvent purged with an inert gas. CAY10441 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of CAY10441 in these solvents is at least 20 mg/ml.

CAY10441 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, CAY10441 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. CAY10441 has a solubility of 0.05 mg/ml in a 1:10 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Recently, a series of relatively simple compounds were found to be high-affinity ligands and functional antagonists for the human IP (prostacyclin) receptor.<sup>1</sup> CAY10441 is one of the more potent of these. CAY10441 antagonizes the carbaprostacyclin-induced activation of human neuroblastoma adenylate cyclase, blocking cyclic AMP accumulation in a dose-dependent manner. Likewise, it inhibits the binding of tritiated iloprost to rodent neuroblastoma cells with a K<sub>i</sub> of about 1.5 nM. At levels between 2-20 mg/kg in rats, CAY10441 shows significant analgesic activity in standard antinociceptive assays.<sup>1</sup>

## Reference

1. Clark, R.D., Jahangir, A., Severance, D., *et al.* Discovery and SAR development of 2-(phenylamino) imidazolines as prostacyclin receptor antagonists. *Bioorg. Medicinal Chem. Letters* **14**, 1053-1056 (2004).

## Related Products

For a list of related products please visit: [www.caymanchem.com/catalog/10005186](http://www.caymanchem.com/catalog/10005186)

**WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY: NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.**

### MATERIAL SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Material Safety Data Sheet, which has been sent *via* email to your institution.

### WARRANTY AND LIMITATION OF REMEDY

Cayman Chemical Company makes **no warranty or guarantee** of any kind, whether written or oral, expressed or implied, including without limitation, any warranty of fitness for a particular purpose, suitability and merchantability, which extends beyond the description of the chemicals hereof. Cayman **warrants only** to the original customer that the material will **meet our specifications at the time of delivery**.

Cayman will carry out its delivery obligations with due care and skill. Thus, in no event will Cayman have **any obligation or liability**, whether in tort (including negligence) or in contract, for any direct, indirect, incidental or consequential damages, even if Cayman is informed about their possible existence.

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Said refund or replacement is conditioned on Buyer giving written notice to Cayman within thirty (30) days after arrival of the material at its destination. Failure of Buyer to give said notice within thirty (30) days shall constitute a waiver by Buyer of all claims hereunder with respect to said material.

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## Cayman Chemical

### Mailing address

1180 E. Ellsworth Road  
Ann Arbor, MI  
48108 USA

### Phone

(800) 364-9897  
(734) 971-3335

### Fax

(734) 971-3640

### E-Mail

[custserv@caymanchem.com](mailto:custserv@caymanchem.com)

### Web

[www.caymanchem.com](http://www.caymanchem.com)