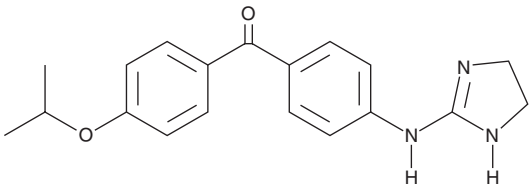
PRODUCT INFORMATION

CAY10449

Item No. 10005913

Formal Name:	4,5-dihydro-N-[4-[[4-(1-methylethoxy)phenyl]carbonyl] phenyl]-1H-imadazol-2-amine
MF:	$C_{19}H_{21}N_3O_2$
FW:	323.4
Purity:	≥98%
UV/Vis.:	λ_{max}: 227, 299 nm
Supplied as:	A crystalline 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

CAY10449 is supplied as a crystalline solid. A stock solution may be made by dissolving the CAY10449 in the solvent of choice, which should be purged with an inert gas. CAY10449 is soluble in organic solvents such as DMSO and dimethyl formamide (DMF). The solubility of CAY10449 in these solvents is approximately 2 mg/ml.

CAY10449 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, CAY10449 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. CAY10449 has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Recently, a series of relatively simple compounds were found to be high-affinity ligands and functional antagonists for the human IP (prostacyclin) receptor.[1] CAY10449 is one of the more potent of these. CAY10449 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_i value of about 3 nM. Although CAY10449 was not tested in rats, the related compound CAY10441 shows significant analgesic activity in standard antinociceptive assays.[1]

Reference

1. Clark, R.D., Jahangir, A., Severance, D., *et al.* Discovery and SAR development of 2-(phenylamino) imidazolines as prostacyclin receptor antagonists. *Bioorg. Med. Chem. Lett.* **14(4)**, 1053-1056 (2004).

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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CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.**CAYMANCHEM**.COM