

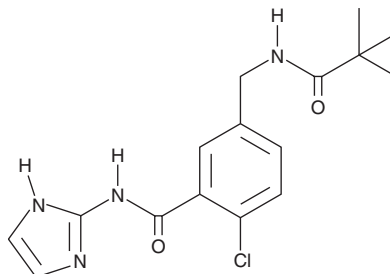
PRODUCT INFORMATION



CAY10700

Item No. 18905

CAS Registry No.: 1381846-21-4
Formal Name: 2-chloro-5-[[[(2,2-dimethyl-1-oxopropyl)amino)methyl]-N-1H-imidazol-2-yl]-benzamide
MF: C₁₆H₁₉ClN₄O₂
FW: 334.8
Purity: ≥98%
UV/Vis.: λ_{max}: 265 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

CAY10700 is supplied as a crystalline solid. A stock solution may be made by dissolving the CAY10700 in the solvent of choice, which should be purged with an inert gas. CAY10700 is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of CAY10700 in these solvents is approximately 2 mg/ml.

CAY10700 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, CAY10700 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. CAY10700 has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Prostaglandin E₂ (PGE₂; Item No. 14010) is the major PG synthesized at sites of inflammation and plays an important role in different inflammatory diseases. It acts as a mediator of pain and inflammation and promotes bone destruction. The increased synthesis of PGE₂ during inflammation can be accounted for by increased expression of both COX-2 and microsomal PGE synthase-1 (mPGES-1). CAY10700 is an orally bioavailable inhibitor of mPGES-1 (IC₅₀ = 0.24 μM in an *in vitro* human whole blood assay).¹ It is inactive against COX-1 and COX-2 (9% inhibition at 100 μM and 16% at 30 μM, respectively).¹

Reference

1. Schiffler, M.A., Antonysamy, S., Bhattachar, S.N., *et al.* Discovery and characterization of 2-acylaminoimidazole microsomal prostaglandin E synthase-1 inhibitors. *J. Med. Chem.* **59**(1), 194-205 (2016).

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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