
Product Data Sheet

Product Name: CAY10700

Cat. No.: GC18710

Chemical Properties

Cas. No. 1381846-21-4

Chemical Name 2-chloro-5-[[[(2,2-dimethyl-1-oxopropyl)amino]methyl]-N-1H-imidazol-2-yl]-benzamide

SMILES C1C=CC=C(CNC(C(C)(C)C)=O)C=C1C(NC2=NC=CN2)=OFormula $C_{16}H_{19}ClN_4O_2$ M.Wt 334.8

Solubility DMF: 2 mg/ml, DMSO: 2 mg/ml, DMSO:PBS (pH 7.2) (1:1): 0.5 mg/ml Storage Store at -20°C

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution: ship with blue ice. All other available size: ship with RT, or blue ice upon request.

Structure **Background**

Prostaglandin E2 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). It is inactive against COX-1 and COX-2 (9% inhibition at 100 μM and 16% at 30 μM, respectively).

References:

[1]. Schiffler, M.A., Antonysamy, S., Bhattachar, S.N., et al. Discovery and Characterization of 2-Acylaminoimidazole Microsomal Prostaglandin E Synthase-1 Inhibitors *Journal of Medicinal Chemistry* 59(1), 194-205 (2016).

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA