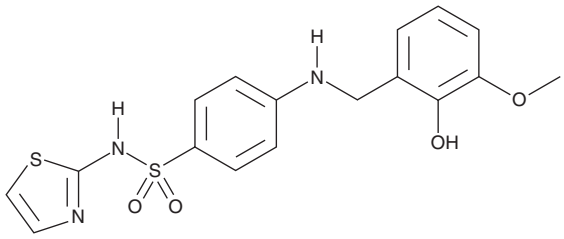
PRODUCT INFORMATION

CAY10698

Item No. 18582

CAS Registry No.:	684236-01-9
Formal Name:	4-[[(2-hydroxy-3-methoxyphenyl) methyl]amino]-N-2-thiazolyl-benzenesulfonamide
MF:	$C_{17}H_{17}N_3O_4S_2$
FW:	391.5
Purity:	≥98%
Stability:	≥2 years at -20°C
Supplied as:	A crystalline solid
UV/Vis.:	λ_{max}: 266, 294 nm



Laboratory Procedures

For long term storage, we suggest that CAY10698 be stored as supplied at -20°C. It should be stable for at least two years.

CAY10698 is supplied as a crystalline solid. A stock solution may be made by dissolving the CAY10698 in the solvent of choice. CAY10698 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of CAY10698 in these solvents is approximately 0.5, 20, and 25 mg/ml, respectively.

CAY10698 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, CAY10698 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. CAY10698 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

Platelet-type 12-lipoxygenase (12-LO; Item No. 10341) catalyzes the formation of 12-HpETE (Item No. 44570) from arachidonic acid (Item No. 90010).[1] It has been found to be expressed in various tumor cells as well as pancreatic islets and can be activated by inflammatory cytokines.[2] It has also been implicated in the modulation of hemostasis and thrombosis through its role in regulating platelet function.[2] CAY10698 is an inhibitor of 12-LO with an IC_{50} value of 5.1 µM. It demonstrates greatly reduced potency for 15-LO-1, 15-LO-2, and 5-LO (IC_{50}s = >50, >40, and >200 µM.[2] The scaffold of this compound has been subjected to medicinal chemistry optimization and biological characterization for development of potential 12-LO inhibitors.[2]

References

1. Chen, X.-S., Kurre, U., Jenkins, N.A., *et al.* cDNA cloning, expression, mutagenesis of C-terminal isoleucine, genomic structure, and chromosomal localizations of murine 12-lipoxygenases. *J. Biol. Chem.* **269**, 13979-13987 (1994).
2. Luci, D.K., Jameson, J.B., II, Yasgar, A., *et al.* Synthesis and structure-activity relationship studies of 4-((2-hydroxy-3-methoxybenzyl)amino)benzenesulfonamide derivatives as potent and selective inhibitors of 12-lipoxygenase. *J. Med. Chem.* **57(2)**, 495-506 (2014).

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