
Product Data Sheet

Product Name: EPAC 5376753

Cat. No.: GC31579

Chemical Properties

Cas. No. 302826-61-5

SMILES O=C(/C(C(N1)=O)=C/C2=CC=C(C3=CC=C(Cl)C=C3Cl)O2)NC1=SFormula $C_{15}H_8Cl_2N_2O_3S$

M.Wt 367.21

Solubility DMSO : 10 mg/mL (27.23 mM; ultrasonic and warming and heat to 60°C)

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 **Protocol****Cell experiment:**

Swiss 3T3 cells are treated with EPAC 5376753 (1, 10, 25, 50, 75, 100 μM) or 1% dimethyl sulfoxide for 48 h. Cell viability is assessed using the CellTiter-Glo assay[1].

References:

[1]. Brown LM, et al. Allosteric inhibition of Epac: computational modeling and experimental validation to identify allosteric sites and inhibitors. J Biol Chem. 2014 Oct 17;289(42):29148-57.

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

Product Data Sheet

Background

EPAC 5376753 is an allosterically inhibitor of Epac which inhibits Epac1 with an IC₅₀ of 4 μ M in Swiss 3T3 cells.

Epac is a key mediator of cAMP signaling. EPAC 5376753, the thiobarbituric acid modification of 5225554, has a greater ability to decrease the conformational changes of Epac necessary for its activation and to inhibit Epac signaling in cells. 5376753 selectively inhibits Epac-mediated migration in fibroblasts[1].

[1]. Brown LM, et al. Allosteric inhibition of Epac: computational modeling and experimental validation to identify allosteric sites and inhibitors. J Biol Chem. 2014 Oct 17;289(42):29148-57.

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