
Product Data Sheet

Product Name: PL553
Cat. No.: GC30662

Chemical Properties

Cas. No. 1456872-74-4

SMILES O=C(NC1=CC=C2C=CC=CC2=C1)[C@@H](N)CC3=CC=C(C(C4=CC=CC=C4)=O)C=C3.O=C(O)C(F)(F)F

Formula $C_{28}H_{23}F_3N_2O_4$ M.Wt 508.49

Solubility Soluble in DMSO 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**Kinase experiment:**

The ability of PL553 to discriminate LTA4H from APN enzymatic activity is tested using the (l)-Ala-β-naphthylamide and PL553 peptide substrates at 40 μM with either APN from porcine kidney (0.33 mU/mL) or recombinant human LTA4H (0.6 μg/mL). The enzymatic reactions proceeds for 1 h at 37°C in a final volume of 100 μL of 50 mM Tris-HCl (pH 7.4) or 50 mM Tris-HCl (pH 7.4) and 100 mM NaCl for APN or LTA4H, respectively[1].

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

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

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References:

[1]. Poras H, et al. A sensitive fluorogenic substrate for selective in vitro and in vivo assay of leukotriene A4 hydrolase activity. Anal Biochem. 2013 Oct 15;441(2):152-61.

Background

PL553 is a specific and high-affinity fluorogenic substrate of Leukotriene A4 hydrolase, with a λ_{max} of 210 nm and λ_{em} of 410 nm.

PL553 is a specific and high-affinity fluorogenic substrate of Leukotriene A4 hydrolase (LTA4H), with a maximum absorption (λ_{max}) of 210 nm and maximum emission (λ_{em}) of 410 nm. PL553 is a better LTA4H substrate than (l)-Ala- β -naphthylamide, and resistant to cleavage by other aminopeptidases, but can be cleaved by FAAH. PL553 (40 μ M) is used to evaluate the potencies of known inhibitors toward LTA4H[1].

[1]. Poras H, et al. A sensitive fluorogenic substrate for selective in vitro and in vivo assay of leukotriene A4 hydrolase activity. Anal Biochem. 2013 Oct 15;441(2):152-61.

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