

Product Data Sheet

Product Name: Lipoxxygenin

Cat. No.: GC47570

Chemical Properties

Cas. No. 2247911-68-6

SMILES OC(C1=C(OC)C(C2=CC=CN=C2OC)=CN=C1OC)C3=CC=C(C=CC=C4)C4=C3

Formula C₂₄H₂₂N₂O₄

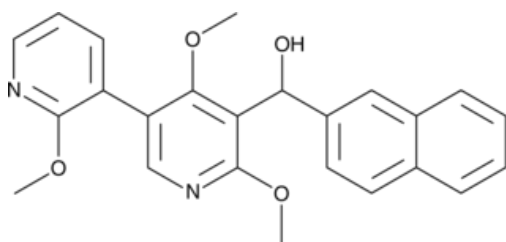
M.Wt 402.4

Solubility DMF: 30mg/mL, DMSO: 30mg/mL, DMSO:PBS (pH 7.2) (1:1): 0.5mg/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

Lipoxxygenin is an inhibitor of 5-lipoxygenase (5-LO) with an IC₅₀ value of 5 μM for inhibition of 5-LO product synthesis in isolated human granulocytes stimulated with the cation ionophore A23187.¹ It inhibits hedgehog-dependent signaling in Shh-LIGHT2 cells and TGF-β-, activin A-, bone morphogenic protein (BMP)-, or Wnt-dependent signaling in HEK293T cells (IC₅₀s = 9.3, 3.2, 8.2, 9.6, and 3.7 μM, respectively, in luciferase reporter assays). Lipoxxygenin (5 and 10 μM) increases levels of troponin T (TnnT), a marker of cardiomyocyte differentiation, in human induced pluripotent stem cells (iPSCs) stimulated with BMP4 and the glycogen synthase kinase 3 (GSK3) inhibitor CHIR99021.

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

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1.Brand, S., Roy, S., Schröder, P., et al.Combined proteomic and in silico target identification reveal a role for 5-lipoxygenase in developmental signaling pathwaysCell Chem. Biol.25(9)1095-1106(2018)

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