

Product Name : CBR-5884

Synonyms : —

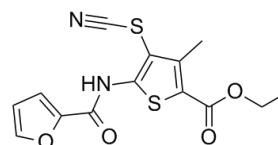
Cat No. : M22643

CAS Number : 681159-27-3

Molecular Formula : C₁₄H₁₂N₂O₄S₂

Formula Weight : 336.39

Chemical Name : —



Description : CBR-5884 is an ?selective, active of phosphoglycerate dehydrogenase (PHGDH) inhibitor with an IC₅₀ of 33 μM. ?CBR-5884 inhibits de novo serine synthesis in cancer cells and is selectively toxic to cancer cell lines with high serine biosynthetic activity. ?CBR-5884 selectively inhibits the proliferation of melanoma and breast cancer lines that have a high propensity for serine synthesis. ?Biochemical characterization of the inhibitor revealed that it was a noncompetitive inhibitor that showed a time-dependent onset of inhibition and disrupted the oligomerization state of PHGDH. CBR-5884 (15 or 30 μM; 3-5 days) selectively inhibits breast cancer lines that have a high propensity for serine synthesis. CBR-5884 (15 or 30 μM; 3-5 days) also selectively inhibits the proliferation of melanoma.

Pathway : Metabolic Enzyme/Protease

Target : Dehydrogenase

Receptor : PHGDH; serine synthesis

Solubility : DMSO: 47 mg/mL (139.72 mM; Need ultrasonic); H₂O: < 0.1 mg/mL (insoluble)

SMILES : CCOC(=O)c1sc(NC(=O)c2ccco2)c(SC#N)c1C

Storage : (-20°C)

Stability : ≥ 2 years

Reference :

1. Edouard Mullarky et al. Identification of a small molecule inhibitor of 3-phosphoglycerate dehydrogenase to target serine biosynthesis in cancers Proc Natl Acad Sci U S A, 2016 Feb 16, 113(7):1778-83.

FOR RESEARCH USE ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE