

CID755673

Catalog No: tcsc3096



Available Sizes

Size: 5mg

Size: 10mg

Size: 50mg



Specifications

CAS No:

521937-07-5

Formula:

$C_{12}H_{11}NO_3$

Pathway:

Apoptosis

Target:

PKD

Purity / Grade:

>98%

Solubility:

DMSO : ≥ 40 mg/mL (184.15 mM)

Observed Molecular Weight:

217.22

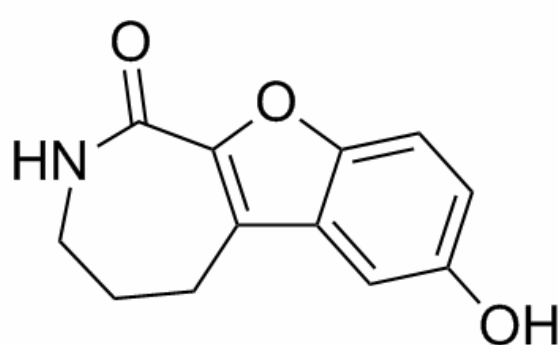
Product Description

CID755673 is a potent and selective **PKD1** inhibitor with an **IC₅₀** of 182 nM.

IC50 & Target: IC50: 182 nM (PKD1)^[1]

In Vitro: CID755673 exhibits selective PKD1 inhibition when compared with AKT, polo-like kinase 1 (PLK1), CDK activating kinase (CAK), CAMKII α , and three different PKC isoforms. It is not competitive with ATP for enzyme inhibition. CID755673 blocks phorbol ester-induced endogenous PKD1 activation in LNCaP cells in a concentration-dependent manner. CID755673 inhibits the known biological actions of PKD1 including phorbol ester-induced class IIa histone deacetylase 5 nuclear exclusion, vesicular stomatitis virus glycoprotein transport from the Golgi to the plasma membrane, and the ilimaquinone-induced Golgi fragmentation. CID755673 inhibits prostate cancer cell proliferation, cell migration, and invasion^[1].

In Vivo: Acute administration of the PKD inhibitor CID755673 to normal mice reduces both PKD1 and 2 phosphorylation in a time and dose-dependent manner. Chronic CID755673 administration to T2D db/db mice for two weeks reduces expression of the gene expression signature of PKD activation, enhances indices of both diastolic and systolic left ventricular function and is associated with reduced heart weight^[2].



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!