Product Data Sheet

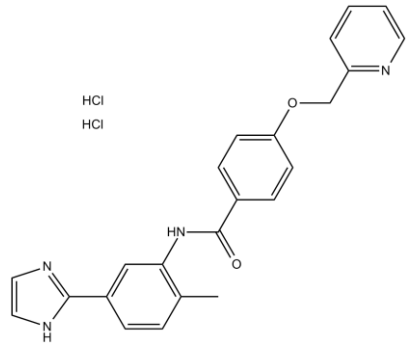
Chemical Properties

Product Name: AZ 12080282 dihydrochloride

Cas No.:

M.Wt: 457.35

Formula: C23H20N4O2.2HCl



Chemical Name: N-(5-(1H-imidazol-2-yl)-2-methylphenyl)-4-(pyridin-2-ylmethoxy)benzamide dihydrochloride

Canonical SMILES: CC1=C(NC(C2=CC=C(OCC3=NC=CC=C3)C=C2)=O)C=C(C4=NC=CN4)C=C1.Cl.Cl

Solubility: Soluble in DMSO

Storage: Desiccate at RT

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.

Shopping Condition: Evaluation sample solution : ship with blue ice
All other available size: ship with RT , or blue ice upon request

Biological Activity

Targets : Stem Cell

Pathways: Hedgehog

Description:

AZ 12080282 dihydrochloride is a selective inhibitor of Hh with IC50 value <0.012 μM [1]. It is also reported that AZ 12080282 also has a selective inhibition to p38α with low nanomolar potency [1].
Hedgehog (Hh) signaling plays an important role in a wide variety of developmental processes, including larval body segment development and adult appendages formation. Abnormal activation of Hh pathway may lead to developmental disease by transforming adult stem cells

into cancer stem cells and also leads to cancers via increasing in Angiogenic Factors, Cyclins, anti-apoptotic genes and decreasing in apoptotic genes [2].
AZ 12080282 is a potent Hh inhibitor and is different from the other reported Hh inhibitors. When tested with Gli transcription factor reporter cell, AZ 12080282 treatment resulted in the Hh signaling pathway inhibition by using shh stimulated cell differentiation assay [1].

***Reference**:*

[1]. Yang, B., et al., Discovery of novel hedgehog antagonists from cell-based screening: Isosteric modification of p38 bisamides as potent inhibitors of SMO. Bioorg Med Chem Lett, 2012. 22(14): p. 4907-11.
[2]. D'Amato, C., et al., Inhibition of Hedgehog signalling by NVP-LDE225 (Erismodegib) interferes with growth and invasion of human renal cell carcinoma cells. Br J Cancer, 2014. 111(6): p. 1168-79.

Caution

FOR RESEARCH PURPOSES ONLY.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Specific storage and handling information for each product is indicated on the product datasheet. Most ApexBio products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Shortterm storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.

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