Product Data Sheet

Chemical Properties

Product Name: Phthalazinone pyrazole
Cas No.: 880487-62-7
M.Wt.: 317.4
Formula: C18H15N5O

Chemical Name: 4-[(5-methyl-1H-pyrazol-3-yl)amino]-2H-phenyl-1-phthalazinone
Canonical SMILES: O=C1C2=C(C=CC=C2)C(NC3=NNC(C)=C3)=NN1C4=CC=CC=C4

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.

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

Biological Activity

Targets: Chromatin/Epigenetics
Pathways: Aurora Kinase

Description:
Phthalazinone pyrazole is potent, selective, and orally bioavailable inhibitor of Aurora-A kinase [1]. The Aurora protein kinase family consists of Aurora-A, -B and -C. The Aurora kinases are important group of enzymes involved in controlling several aspects of cell division in mammalian cells. Dysfunction of these kinases has been associated with a failure to maintain a stable chromosome content, a state that can contribute to tumourigenesis. Aurora-A is overexpressed in a variety of tumor types and displays oncogenic activity [2].
In vitro: Phthalazinone pyrazole potently inhibited the activity of Aurora A kinase with an IC50 of 31 nM. It showed no inhibitory effect on Aurora B kinase at doses up to 100 μM. Phthalazinone pyrazole inhibited the proliferation of HCT116, Colo205, and MCF-7 cells with IC50 values of 7.8, 2.9, and 1.6 μM, respectively [1].

Reference:

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.