

Product Data Sheet

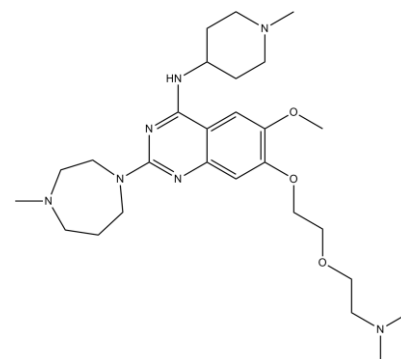
Chemical Properties

Product Name: UNC0321

Cas No.: 1238673-32-9

M.Wt: 515.69

Formula: C₂₇H₄₅N₇O₃



Chemical Name: 7-[2-[2-(dimethylamino)ethoxy]ethoxy]-6-methoxy-2-(4-methyl-1,4-diazepan-1-yl)-N-(1-methylpiperidin-4-yl)quinazolin-4-amine

Canonical SMILES: CN1CCCN(CC1)C2=NC3=CC(=C(C=C3C(=N2)NC4CCN(CC4)C)OC)OCCOCCN(C)C

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: Histone Methyltransferase

Description:

UNC0321 is the most potent small-molecule inhibitor of protein lysine methyltransferase G9a, an enzyme methylating lysine 9 of histone H3 (H3K9) and lysine 373 (K373) of p53, with the inhibition constant K_i value of 63 nM and the half maximal inhibition concentration IC_{50} values of 9 nM in enzyme-coupled SAH detection assay (ECSD) and 6 nM in chemiluminescence-based

oxygen tunneling assay (CLOT) respectively [1].

UNC0321 has also been found to inhibit G9a like protein (GLP), an H3K9 and p53 K373 methyltransferase sharing 80% sequence identity in SET domain with G9a, with IC50 values of 15 nM (ECSD) and 23 nM (CLOT) respectively [1].

Reference:

[1] Liu F, Chen X, Allali-Hassani A, Quinn AM, Wigle TJ, Wasney GA, Dong A, Senisterra G, Chau I, Siarheyeva A, Norris JL, Kireev DB, Jadhav A, Herold JM, Janzen WP, Arrowsmith CH, Frye SV, Brown PJ, Simeonov A, Vedadi M, Jin J. Protein lysine methyltransferase G9a inhibitors: design, synthesis, and structure activity relationships of 2,4-diamino-7-aminoalkoxy-quinazolines. *J Med Chem.* 2010 Aug 12;53(15):5844-57. doi: 10.1021/jm100478y.

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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