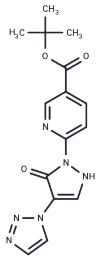
Data Sheet (Cat.No.T7880)

TargetMol

IOX4

Chemical Properties



CAS No. : 1154097-71-8

Formula: C15H16N6O3

Molecular Weight: 328.33

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	IOX4 is a potent PHD2 inhibitor (IC50 = 1.6 nM)
Targets(IC50)	HIF/HIF Prolyl-Hydroxylase
In vivo	IOX4 as a highly potent and selective inhibitor of human PHD2, As shown by studies with mice, IOX4 is useful for in vivo work;?it will then be useful for investigations on the suitability of the PHDs as targets for cerebral diseases such as stroke.?The combined kinetic and biophysical analyses reveal that IOX4 (and IOX2) compete with 2OG for binding to PHD2;?the triazole rings of the inhibitors bind in the pocket occupied by the CH2CH2COOH side chain of 2OG.?The results thus reveal the potential of non-acid containing PHD inhibitors−an important finding given the potential of HIFα upregulation mediated by PHD inhibition in the treatment of stroke, as acids do not often permeate the blood-brain barrier efficiently[1].

Solubility Information

Solubility	DMSO: 83.33 mg/mL (253.8 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.0457 mL	15.2286 mL	30.4572 mL
5 mM	0.6091 mL	3.0457 mL	6.0914 mL
10 mM	0.3046 mL	1.5229 mL	3.0457 mL
50 mM	0.0609 mL	0.3046 mL	0.6091 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Chan Mun Chiang, Atasoylu Onur, Hodson Emma,et al. Potent and Selective Triazole-Based Inhibitors of the Hypoxia-Inducible Factor Prolyl-Hydroxylases with Activity in the Murine Brain[J]. Plos One, 10(7):e0132004-.
Murray J K , Balan C , Allgeier A M , et al. Dipeptidyl-Quinolone Derivatives Inhibit Hypoxia Inducible Factor-1α Prolyl Hydroxylases-1, -2, and -3 with Altered Selectivity[J]. Journal of Combinatorial Chemistry, 2010, 12(5):676-686.

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