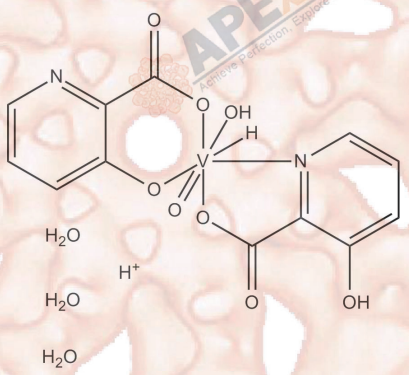
VO-Ohpic trihydrate

Cat. No.: A3923
CAS No.: 476310-60-8
Formula: C12H16N2O11V
M.Wt: 415.2
Synonyms: VO-Ohpic;VO Ohpic
Target: Cell Cycle/Checkpoint
Pathway: PTEN
Storage: Store at -20°C



Solvent & Solubility

In Vitro

⩾121.8 mg/mL in DMSO, ⩾45.8 mg/mL in EtOH with ultrasonic, insoluble in H2O

Preparing Stock Solutions

Concentration \ Mass / Solvent	1mg	5mg	10mg
1 mM	2.4085 mL	12.0424 mL	24.0848 mL
5 mM	0.4817 mL	2.4085 mL	4.8170 mL
10 mM	0.2408 mL	1.2042 mL	2.4085 mL

Please refer to the solubility information to select the appropriate solvent.

Biological Activity

Shortsummary	PTEN inhibitor
IC_{50} & Target	

In Vitro

Cell Viability Assay

Cell Line:	NIH 3T3 and L1 fibroblasts
Preparation method:	The solubility of this compound in DMSO is >10 mM. General tips for obtaining a higher concentration: Please warm the tube at 37°C for 10 minutes and/or shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.
Reacting conditions:	0, 10, 20, 40, 75, 150 and 500 nM; 15 mins
Applications:	In NIH 3T3 and L1 fibroblasts, VO-Ohpic Trihydrate dose-dependently

		increased Akt phosphorylation at site Ser473 and Thr308. This effect reached saturation at 75 nM.
In Vivo	**Animal experiment**	
	Animal models:	In-vivo ischemia and reperfusion mouse model
	Dosage form:	10 μg/kg; i.p.
	Applications:	Inhibition of PTEN by VO-Ohpic Trihydrate decreased left ventricular systolic pressure and heart rate before ischemia, but resulted in an increase in cardiac functional recovery and a decrease in myocardial infarct size after ischemia-reperfusion.
	Other notes:	Please test the solubility of all compounds indoor, and the actual solubility may slightly differ with the theoretical value. This is caused by an experimental system error and it is normal.

Product Citations

See more customer validations on www.apexbt.com.

References

[1]. Rosivatz E, Matthews J G, McDonald N Q, et al. A small-molecule inhibitor for phosphatase and tensin homologue deleted on chromosome 10 (PTEN). ACS chemical biology, 2006, 1(12): 780-790.

[2]. Zu L, Shen Z, Wesley J, Cai ZP. PTEN inhibitors cause a negative inotropic and chronotropic effect in mice. Eur J Pharmacol. 2011 Jan 10;650(1):298-302.

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.