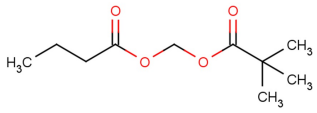
Data Sheet (Cat.No.T16545)

Pivanex

Chemical Properties



CAS No.:	122110-53-6
Formula:	C10H18O4
Molecular Weight:	202.25
Appearance:	N/A
Storage:	0-4℃ for short term (days to weeks), or -20℃ for long term (months).

Biological Description

Description	Pivanex is a derivative of Butyric acid and is an orally active HDAC inhibitor. Pivanex has antimetastic and antiangiogenic properties. Pivanex down-regulates bcr-abl protein and increases apoptosis.
Targets(IC_{50})	HDAC;Bcr-Abl: None
In vitro	Pivanex has selective toxicity to acute leukemia and drug-resistant primary leukemia and cancer cell lines. Pivanex (200 μM) causes enhancement in the G2-M phase, moderate enhancement in the S phase, and a slight reduction in G0-G1 of the cell cycle. Pivanex (100-500 μM) shows significant anti-proliferation activity in K562 cells. Pivanex (100-500 μM) also increases apoptosis and caspase activity in K562 cells [1][2].
In vivo	Pivanex treatment also marked delays in the end stage of disease as defined by the onset of body mass loss. Pivanex (200 mg/kg, b.i.d, daily) obviously improves the survival of SMN7 SMA mice [3].

Solubility Information

Solubility	DMSO: 100 mg/mL (494.44 mM) (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	4.944 mL	24.722 mL	49.444 mL
5 mM	0.989 mL	4.944 mL	9.889 mL
10 mM	0.494 mL	2.472 mL	4.944 mL
50 mM	0.099 mL	0.494 mL	0.989 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 ℃ for 6 months; - 20 ℃ for 1 month. Please use it as soon as possible.

Reference

1. Rabizadeh E, et al. Pivanex, a histone deacetylase inhibitor, induces changes in BCR-ABL expression and when combined with STI571, acts synergistically in a chronic myelocytic leukemia cell line. Leuk Res. 2007 Aug;31(8):1115-23. Epub 2007 Jan 30.

2. Batova A, et al. The histone deacetylase inhibitor AN-9 has selective toxicity to acute leukemia and drug-resistant primary leukemia and cancer cell lines. Blood. 2002 Nov 1;100(9):3319-24.

3. Edwards JD, et al. Effect of the Butyrate Prodrug Pivaloyloxymethyl Butyrate (AN9) on a Mouse Model for Spinal Muscular Atrophy. J Neuromuscul Dis. 2016 Nov 29;3(4):511-515.

Tel:781-999-4286 E-mail:info@targetmol.com Address:36 Washington Street,Wellesley Hills,MA 02481