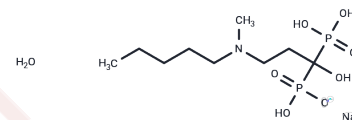


Ibandronate sodium monohydrate

Chemical Properties

CAS No. :	138926-19-9
Formula:	C ₉ H ₂₄ NNaO ₈ P ₂
Molecular Weight:	359.23
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	Ibandronate sodium monohydrate (BM-210955) is a highly potent nitrogen-containing bisphosphonate used for the treatment of osteoporosis.
Targets(IC50)	Apoptosis
In vitro	Ibandronate (1.25-2 μM) significantly reduces endothelial cell growth, while ibandronate (2 μM) also significantly reduces capillary-like tube formation and increases apoptosis of endothelial cells. Ibandronate (< 100 μM) dose-dependently increases VEGF expression in endothelial cells. [1] Ibandronate (< 100 μM) inhibits growth of both prostate cancer cell lines (LNCaP and PC-3) in a dose dependent manner. [2]
In vivo	Ibandronate administered either daily (2.5 mg) or intermittently (20 mg every other day for 12 doses every 3 months) significantly reduces the risk of new morphometric vertebral fractures by 62% and 50% (p = 0.0006), respectively, in osteoporotic women after 3 years' treatment. Ibandronate administered either daily (2.5 mg) or intermittently (20 mg every other day for 12 doses every 3 months) significantly and progressively increases BMD of lumbar spine by 6.5% and 5.7%, respectively, in osteoporotic women after 3 years' treatment. [3] Ibandronate (< 125 mg/kg s.c.) results in a dose dependent increase in bone mineral density (BMD), trabecular bone volume and trabecular number, load to failure (Fmax), and yield load in long bones and vertebrae in ovariectomized rats, and increased trabecular separation in ovariectomized rats is fully prevented by all doses. [4]

Solubility Information

Solubility	DMSO: Insoluble, H ₂ O: 10 mM, Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
------------	--

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.7837 mL	13.9187 mL	27.8373 mL
5 mM	0.5567 mL	2.7837 mL	5.5675 mL
10 mM	0.2784 mL	1.3919 mL	2.7837 mL
50 mM	0.0557 mL	0.2784 mL	0.5567 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

- Morgan C, et al. *Microvasc Res*, 2009, 78(3), 453-458.
- Epplen R, et al. *Acta Oncol*, 2011, 50(1), 127-133.
- Chesnut III CH, et al. *J Bone Miner Res*, 2004, 19(8), 1241-1249.
- Bauss F, et al. *J Rheumatol*, 2002, 29(10), 2200-2208.
- Wagner D, et al. *Transplantation*, 2012, 93(3), 331-336.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481