Product datasheet

Zoledronic acid, FPP synthase inhibitor ab141980

Overview

Product name
Zoledronic acid, FPP synthase inhibitor

Description
Highly potent bisphosphonate. FPP synthase inhibitor.

Biological description
Highly potent bisphosphonate. FPP synthase inhibitor. Inhibits osteoclastogenesis ($IC_{50} = 15$ nM). Inhibits ASM and FDPS. Activates PKC. Inhibits osteoclastic bone resorption, shows antihypocalcemic and antiangiogenic effects in vivo.

Purity
> 98%

CAS Number
118072-93-8

Chemical structure

![Chemical structure image](image)

Chemical name
(1-Hydroxy-2-imidazol-1-yl-1-phosphonoethyl)phosphonic acid

Molecular weight
272.09

Molecular formula
$C_{5}H_{10}N_{2}O_{7}P_{2}$

PubChem identifier
68740

Storage instructions
Store at -20°C. Store under desiccating conditions. The product can be stored for up to 12 months.

Solubility overview
Soluble in water to 25 mM

Handling
Wherever possible, you should prepare and use solutions on the same day. However, if you need to make up stock solutions in advance, we recommend that you store the solution as aliquots in tightly sealed vials at -20°C. Generally, these will be useable for up to one month. Before use, and prior to opening the vial we recommend that you allow your product to equilibrate to room temperature for at least 1 hour.

Need more advice on solubility, usage and handling? Please visit our frequently asked questions (FAQ) page for more details.

SMILES
C1=CN(C=N1)CC(O)(P(=O)(O)O)P(=O)(O)O

Source
Synthetic

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES, NOT FOR USE IN HUMANS"
Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit https://www.abcam.com/abpromise or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors
- Abcam biochemicals are novel compounds and we have not tested their biological activity in house. Please use the literature to identify how to use these products effectively. If you require further assistance please contact the scientific support team