

AZ-PFKFB3-67

Chemical Properties

CAS No. : 1704741-11-6

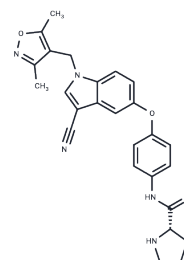
Formula: C₂₆H₂₅N₅O₃

Molecular Weight: 455.51

Store at low temperature

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 | AZ-PFKFB3-67 is a potent and selective PFKFB3 kinase inhibitor with an IC ₅₀ =11nM for PFKFB3, reduces MCL-1, and inhibits angiogenesis by decreasing lactic acid production and ATP levels in endothelial cells (ECs) in tube-forming assays, and has neuroprotective effects. |
| Targets(IC ₅₀) | Bcl-2 Family,Others,Glucokinase,Phosphatase |
| In vitro | AZ-PFKFB3-67 is a highly selective PFKFB3 inhibitor with strong target inhibitory activity, exhibiting IC ₅₀ values of 1.13 μM for PFKFB1, 0.159 μM for PFKFB2, and 0.011 μM for PFKFB3. In cellular assays, AZ-PFKFB3-67 inhibits fructose-2,6-bisphosphate (F-2,6-BP) production with an IC ₅₀ of 0.281 μM, while having minimal effect on cellular lactate levels (IC ₅₀ > 30 μM), indicating a pronounced inhibitory effect on early glycolytic regulation[1]. |

Solubility Information

| | |
|---------------------|--|
| Solubility | DMSO: 80 mg/mL (175.63 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble) |
| In vivo Formulation | 10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (4.39 mM),Sonication is recommended. <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i> |

Preparing Stock Solutions

| | 1mg | 5mg | 10mg |
|-------|------------|------------|-------------|
| 1 mM | 2.1953 mL | 10.9767 mL | 21.9534 mL |
| 5 mM | 0.4391 mL | 2.1953 mL | 4.3907 mL |
| 10 mM | 0.2195 mL | 1.0977 mL | 2.1953 mL |
| 50 mM | 0.0439 mL | 0.2195 mL | 0.4391 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

Boyd S, et al. Structure-Based Design of Potent and Selective Inhibitors of the Metabolic Kinase PFKFB3. J Med Chem. 2015 Apr 23;58(8):3611-25.

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