**Proteins** 

# **Product** Data Sheet

## Bismuth subnitrate

Cat. No.: HY-B2181 CAS No.: 1304-85-4 Molecular Formula:  $Bi_{5}H_{9}N_{4}O_{22}$ Molecular Weight: 1461.99

Others Target: Pathway: Others

Storage: 4°C, protect from light, stored under nitrogen

\* In solvent: -80°C, 6 months; -20°C, 1 month (protect from light, stored under

nitrogen)

Bi<sub>5</sub>(OH)<sub>9</sub>(NO<sub>3</sub>)<sub>4</sub>O

#### **SOLVENT & SOLUBILITY**

In Vitro

DMSO: 20 mg/mL (13.68 mM; ultrasonic and warming and heat to 60°C) H<sub>2</sub>O: 1 mg/mL (0.68 mM; ultrasonic and warming and heat to 60°C)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	0.6840 mL	3.4200 mL	6.8400 mL
	5 mM	0.1368 mL	0.6840 mL	1.3680 mL
	10 mM	0.0684 mL	0.3420 mL	0.6840 mL

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

In Vivo

1. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 1.11 mg/mL (0.76 mM); Clear solution

### **BIOLOGICAL ACTIVITY**

Description

Bismuth subnitrate (Bismuth(III) oxynitrate) is a bismuth(III) compound that bears significant medical uses (e.g., as an antidiarrheic agent). Bismuth subnitrate is a simple, readily available and effective catalyst for the Markovnikov-type hydration of terminal acetylenes<sup>[1]</sup>.

#### **REFERENCES**

[1]. Szécsényi Z, et al. Bismuth Subnitrate-Catalyzed Markovnikov-Type Alkyne Hydrations under Batch and Continuous Flow Conditions. Molecules. 2021;26(10):2864. Published 2021 May 12.

 $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$ 

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