

# **Product** Data Sheet

# α-Glucosidase-IN-22

Cat. No.: HY-152158 CAS No.: 2870693-28-8 Molecular Formula:  $C_{14}H_{11}N_3O_2S$ Molecular Weight: 285.32

Target: Glucosidase

Pathway: Metabolic Enzyme/Protease

Storage: Powder -20°C 3 years

4°C 2 years -80°C 6 month

In solvent -80°C 6 months

-20°C 1 month

### **SOLVENT & SOLUBILITY**

In Vitro

DMSO: 125 mg/mL (438.10 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	3.5048 mL	17.5242 mL	35.0484 mL
	5 mM	0.7010 mL	3.5048 mL	7.0097 mL
	10 mM	0.3505 mL	1.7524 mL	3.5048 mL

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

### **BIOLOGICAL ACTIVITY**

Description

 $\alpha$ -Glucosidase-IN-22 (compound 7i), a benzimidazole, is a potent  $\alpha$ -glucosidase inhibitor with an IC<sub>50</sub> of 0.64  $\mu$ M.  $\alpha$ -Glucosidase-IN-22 is a potent anti-diabetic agent and has the potential for type 2 diabetes mellitus (T2DM) research<sup>[1]</sup>.

#### **REFERENCES**

[1]. Sardar Ali, et al. Novel 5-(Arylideneamino)-1 H-Benzo[d]imidazole-2-thiols as Potent Anti-Diabetic Agents: Synthesis, In Vitro  $\alpha$ -Glucosidase Inhibition, and Molecular Docking Studies. ACS Omega. 2022 Nov 23;7(48):43468-43479.

Caution: Product has not been fully validated for medical applications. For research use only.

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