Product Data Sheet

Inhibitors

Screening Libraries

Proteins

Valienamine

Cat. No.: HY-131504A **CAS No.:** 38231-86-6

Molecular Formula: $C_7H_{13}NO_4$ Molecular Weight: 175.18

Target: Glucosidase

Pathway: Metabolic Enzyme/Protease

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.

HO,,,OH

BIOLOGICAL ACTIVITY

Description	Valienamine is the alpha-glucosidase inhibitor. Valienamine is the key functional component of many natural glycosidase inhibitors including the crop protectant validamycin A and the antidiabetic agent acarbose ^[1] .
IC ₅₀ & Target	${\sf alpha-glucosidase}^{[1]}$

REFERENCES

[1]. Degwert U, et al. Studies on the biosynthesis of the alpha-glucosidase inhibitor acarbose: valienamine, a m-C7N unit not derived from the shikimate pathway. J Antibiot (Tokyo). 1987;40(6):855-861.

[2]. Cui L, et al. A Validamycin Shunt Pathway for Valienamine Synthesis in Engineered Streptomyces hygroscopicus 5008. ACS Synth Biol. 2020;9(2):294-303.

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA