
Product Data Sheet

Product Name: Mab Aspartate Decarboxylase-IN-1

Cat. No.: GC68457

Chemical Properties

Cas. No. 2755712-12-8

Formula $C_{16}H_{11}N_3O_3$ M.Wt 293.28

Solubility Storage 4°C, away from moisture and light

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT, or blue ice upon request.

Structure

Background

Mab Aspartate Decarboxylase-IN-1 is a potent **aspartate decarboxylase (PanD)** inhibitor with an **IC₅₀** value of 56.3 μM. Mab Aspartate Decarboxylase-IN-1 shows antibacterial activity^[1].

Mab Aspartate Decarboxylase-IN-1 (compound analogue 2) shows inhibits against the mutants *Mab PanDE119A*, *Mab PanDS135A* and *Mab PanDY126A* mutants with the inhibition rates of 70.5%, 74.4%, 81.8%, respectively^[1].

Mab Aspartate Decarboxylase-IN-1 (0-200 μM) shows inhibition on *mycobacterium abscessus* (*Mab*) PanD enzyme activity in the conversion of l-Asp to β-Ala with an IC₅₀ value of 56.3±4.8 μM^[1].

Mab Aspartate Decarboxylase-IN-1 (0-4 mM) shows antibacterial activity for *M. abscessus subsp. abscessus* ATCC 19977 with an IC₅₀ value of 0.7mM, and *M. abscessus subsp. bolletii* CCUG 50184T, *M. abscessus subsp. massiliense* CCUG 48898T, *M. abscessus subsp. abscessus* Bamboo, *M. abscessus subsp. abscessus* ATCC 19977 with IC₅₀s of 1-2 mM^[1].

Mab Aspartate Decarboxylase-IN-1 shows mainly electrostatic- and hydrogen bonding

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

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interaction with the target enzyme^[1].

[1]. Saw WG, et al. Structural and Mechanistic Insights into Mycobacterium abscessus Aspartate Decarboxylase PanD and a Pyrazinoic Acid-Derived Inhibitor. ACS Infect Dis. 2022 Jul 8;8(7):1324-1335.

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