

Thiamet-G, O-GlcNAcase alpha 1 antagonist

Catalog	Unit
TBI2824-5MG	5 mg
TBI2824-25MG	25 mg

Product Details

Formal Name: (3aR,5R,6S,7R,7aR)-2-(Ethylamino)-3a,6,7,7a-tetrahydro-5-(hydroxymethyl)-5H-Pyrano[3,2-d]thiazole-6,7-diol

Alternate Names: Thiamet G

Molecular Formula: C₉H₁₆N₂O₄S

Formula Weight: 248.30

CAS Number: 1009816-48-1

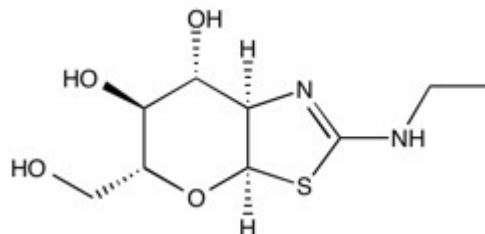
Purity: >98%

Formulation: powder

Solubility: Soluble in DMSO (up to 10 mg/ml).

Storage: -20°C

Stability: ≥ 1 year.



Applications

O-GlcNAcase alpha 1 antagonist

Functions

Potent, selective inhibitor of O-GlcNAcase (K_i = 21 nM for human O-GlcNAcase). Increases levels of O-GlcNAc-modified proteins in cellular assays and in vivo. Suppresses phosphorylation of tau protein in rat cortex and hippocampus. Stabilizes tau against aggregation and slows neurodegeneration. Prevents cognitive decline and amyloid plaque formation in bigenic tau/APP mutant mice. Active in vivo and blood brain barrier permeable.

Application Procedures

First dissolved in DMSO (up to 10 mg/ml), then diluted to aqueous buffer. Solutions in DMSO may be stored at -20°C for up to 1 month.

For research use only.