

Swainsonine, Glycosidase inhibitor

Catalog	Unit
TBI2674 - 1MG	1 mg
TBI2674 - 5MG	5 mg

Product Details

Formal Name: (1S,2R,8R,8aR)-octahydro-1,2,8-indolizinetriol

Molecular Formula: C₈H₁₅NO₃ **Formula Weight:** 173.21 **CAS Number:** 72741-87-8

Purity: >98%

Formulation: Powder

Solubility: Soluble in DMSO (up to 10 mg/ml), in Ethanol (up to 10 mg/ml) or in Water (up to 8 mg/ml)

Storage: -20° C Stability: ≥ 2 years.

Applications

Glycosidase inhibitor

Functions

Swainsonine (72741-87-8) is a naturally occurring alkaloidal toxin found in locoweed. Inhibits the biosynthesis of complex glycoproteins by inhibition of Golgi mannosidase II ($IC_{50} = 0.2$ mM). Inhibits growth and potentiates the cytotoxic effect of taxol in hepatocellular carcinoma in vivo. Induces apoptosis in a variety of cell types including cerebral cortical neurons. Impairs adult neurogenesis and spatial learning and memory. Abrogation of complex glycosylation by swainsonine results in strain-and cell-specific inhibition of prion replication. Induces lysosomal storage disease in farm animals.

Application Procedures

First dissolved in DMSO (up to 10 mg/ml), in Ethanol (up to 10 mg/ml), then diluted to aqueous buffer. Solutions in DMSO, ethanol or distilled water may be stored at -20°C for up to 3 months.

Relative Products

TBI1170	Mitomycin C
TBI1345	E64, Cysteine protease inhibitor
TBI1347	E64d, Cysteine protease inhibitor
TBI2064	Chromomycin A3
TBI2069	Cytochalasin B
TBI2794	5-EDU, DNA Click labeling probe
TBI2071	Cytochalasin D
TBI1286	Bestatin, Aminopeptidase inhibitor
TBI2140	Gemcitabline
TBI2058	Aphidicolin, DNA polymerase Inhibito

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