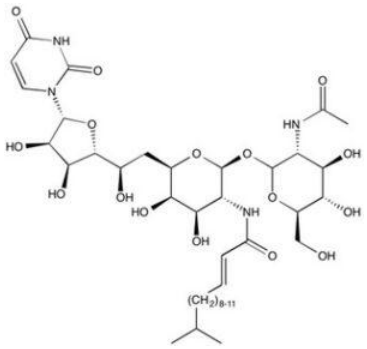
Tribioscience

Tunicamycin, ER stress inducer

Catalog	Unit
TBI2111-5MG	5 mg
TBI2111-25MG	25 mg

Product Details



Molecular Formula: $C_{38}H_{62}N_4O_{16}$
Formula Weight: 830.9
CAS Number: 11089-65-9
Purity: >98%
Formulation: Powder
Solubility: Soluble in DMSO (up to 40 mg/ml) or in Ethanol (up to 5 mg/ml with warming).
Storage: -20°C
Stability: ≥ 2 years.

Applications

ER stress inducer

Functions

Fermentation product from *Streptomyces lysosuperificus*. Provided as a mixture of tunicamycin A (C_{14}), B (C_{15}), C (C_{16}) and D (C_{17}) homologs varying in the number of carbon atoms in the fatty acid chain.
Potent inhibitor of GlcNAc phosphotransferase which thereby inhibits glycoprotein biosynthesis. Causes endoplasmic reticulum stress-induced autophagy and unfolded protein response. The MFSD2A transporter is a key mediator in the cellular response to tunicamyin. Arrests cell cycle in late G1.

Application Procedures

First dissolved in DMSO (up to 40 mg/ml) or in Ethanol (up to 5 mg/ml with warming), then diluted to aqueous buffer. Solutions in DMSO or ethanol may be stored at -20°C for up to 1 month.

For research use only.