# abcam

### Product datasheet

## Tunicamycin, Protein glycosylation inhibitor ab120296

35 References 画像数 3

製品の概要

製品名 Tunicamycin, Protein glycosylation inhibitor

製品の詳細 Antibiotic. Protein glycosylation inhibitor.

生理活性の詳細 Nucleoside antibiotic that inhibits protein glycosylation. Inhibits GlcNAc phosphotransferase

(GPT) and inhibits the transfer of N-acetylglucosamine-1-phosphate from UDP-N-

acetylglucosamine to dolichol phosphate in the first step of glycoprotein synthesis. Inhibits N-linked glycosylation and blocks the formation of N-glycosidic protein-carbohydrate linkages.

Active in vitro against Gram-positive bacteria, yeasts, fungi and viruses.

特記事項 This compound is a mixture of the homologs of tunicamycin: A, B, C and D which vary in the

carbon chain length (n=8 to 11)

**CAS 番号** 11089-65-9

**構造式** Q H

製品の特性

分子量 844.95

分子式  $C_{39}H_{64}N_4O_{16}$  (for tunicamycin C, n = 10)

**PubChem 登録番号** 16220051

保存方法 Store at +4°C. Store under desiccating conditions. The product can be stored for up to 12

months.

溶解性 Soluble in DMSO to 50 mM

使用に関する注意 Wherever possible, you should prepare and use solutions on the same day. However, if you need

to make up stock solutions in advance, we recommend that you store the solution as aliquots in tightly sealed vials at -20°C. Generally, these will be useable for up to one month. Before use, and

1

prior to opening the vial we recommend that you allow your product to equilibrate to room temperature for at least 1 hour.

Toxic, refer to SDS for further information.

Need more advice on solubility, usage and handling? Please visit our <u>frequently asked</u> <u>questions (FAQ) page</u> for more details.

SMILES 線形表記

 $\begin{array}{l} {\sf CC(C)CCCCCC/C=C/C(=O)N[C@@H]1[C@H]([C@H]([C@H]([C@H]10[C@H]2[C@H]10[C@H]2[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[C@H]10[CWH]10[CWH]10[CWH]10[CWH]10[CWH]10[CWH]10[CWH]10[CWH]10[CWH]10[CWH]10[CWH]10[CWH]10[CWH]10[CWH]10[CWH]10[CWH]10[CWH]10[CWH]10[CWH]10[CWH]10[CWH]10[C$ 

由来

Streptomyces sp.

#### アプリケーション

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アプリケーション	Abreviews	特記事項
Functional Studies		Use at an assay dependent concentration.

#### 画像

Chemical Structure - Tunicamycin, Protein glycosylation inhibitor (ab120296)

2D chemical structure image of ab120296, Tunicamycin, Protein glycosylation inhibitor



Western blot - Tunicamycin, Protein glycosylation inhibitor. (ab120296)

**All lanes :** Anti-ATF-4 antibody [EPR18111] (<u>ab184909</u>) at 1/1000 dilution

**Lane 1 :** Untreated HepG2 (Human liver hepatocellular carcinoma cell line) whole cell lysate (control)

**Lane 2 :** HepG2 (Human liver hepatocellular carcinoma cell line) treated with 5  $\mu$ M MG-132 (<u>ab141003</u>) and 3  $\mu$ g/ml tunicamycin (ab120296) for 6 hours whole cell lysate

Lysates/proteins at 20 µg per lane.

#### Secondary

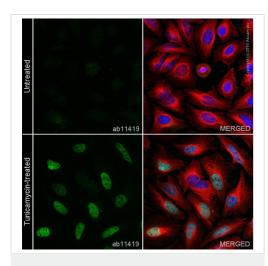
**All lanes :** Goat Anti-Rabbit  $\lg G \ H\&L \ (HRP) \ (\underline{ab97051})$  at 1/100000 dilution

Observed band size: 50 kDa

Exposure time: 15 seconds

**Blocking/Dilution buffer:** 5% NFDM/TBST.

The molecular weight observed is consistent with what has been described in the literature (PMID: 22095285).



Immunocytochemistry - Tunicamycin, Protein glycosylation inhibitor (ab120296)

**ab11419** staining DDIT3 in HeLa (Human epithelial cell line from cervix adenocarcinoma) cells +/- Tunicamycin 1.5μM, 6 hours (ab120296).

The cells were fixed with 4% PFA (10 min), permeabilized with 0.1% Triton-X for 5 mins and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1%PBS-Tween for 1h. The cells were then incubated overnight at +4°C with <u>ab11419</u> at 5μg/ml and <u>ab6046</u>, Rabbit polyclonal to beta Tubulin - Loading Control, at 1/1000 dilution. Cells were then incubated with <u>ab150117</u>, Goat Anti-Mouse lgG H&L (Alexa Fluor<sup>®</sup> 488) at 1/1000 dilution (shown in green) and <u>ab150084</u>, Goat polyclonal Secondary Antibody to Rabbit lgG - H&L (Alexa Fluor<sup>®</sup> 594) at 1/1000 dilution (shown in pseudocolor red). Nuclear DNA was labeled with DAPI (shown in blue).

Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).

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