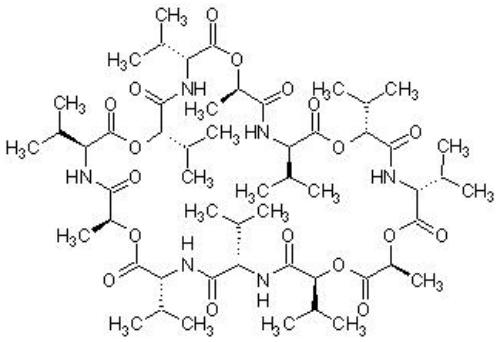
abcam

Product datasheet

Valinomycin from Streptomyces fulvissimus, K+ selective ionophore ab120852

2 Images

Overview

Product name	Valinomycin from Streptomyces fulvissimus, K+ selective ionophore
Description	K^+ selective ionophore
Biological description	K^+ selective ionophore. Natural dodecadepsipeptide. Antitumor, antifungal and antibacterial effects. Apoptosis due to caspase independent mechanisms.
CAS Number	2001-95-8
Chemical structure	

Properties

Chemical name	Cyclo(D-α-hydroxyisovaleryl-D-valyl-L-lactoyl-L-valyl-D-α-hydroxyisovaleryl-D-valyl-L-lactoyl-L-valyl-D-α-hydroxyisovaleryl-D-valyl-L-lactoyl-L-valyl)
Molecular weight	1111.33
Molecular formula	$C_{54}H_{90}N_6O_{18}$
Storage instructions	Store at -20°C. Store under desiccating conditions. The product can be stored for up to 12 months.
Solubility overview	Soluble in DMSO to 25 mM and in ethanol to 25 mM
Handling	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 week. Before use, and 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 **frequently asked questions (FAQ) page** for more details.

Source *Streptomyces fulvissimus*

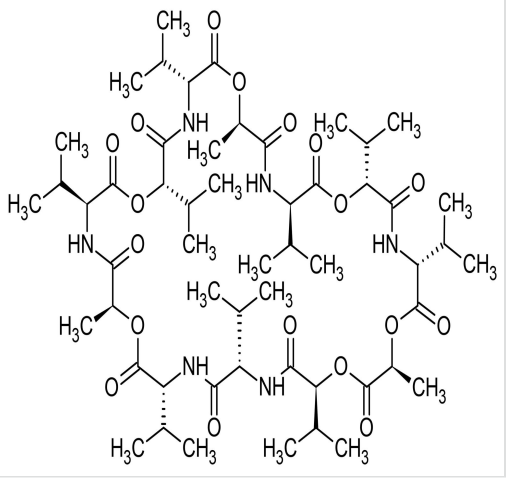
Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab120852 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

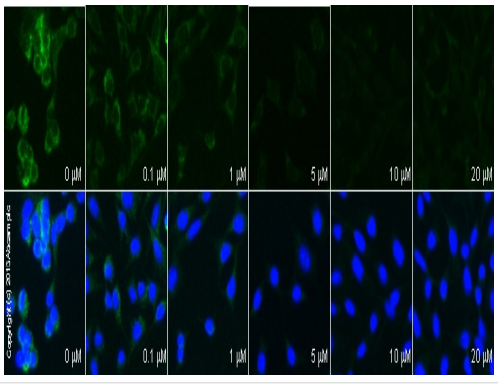
Application	Abreviews	Notes
Functional Studies		Use at an assay dependent concentration.

Images



Chemical Structure - Valinomycin from Streptomyces fulvissimus, K^+ selective ionophore (ab120852)

2D chemical structure image of ab120852, Valinomycin from Streptomyces fulvissimus, K+selective ionophore



Immunocytochemistry/ Immunofluorescence - Valinomycin from Streptomyces fulvissimus, K+ selective ionophore (ab120852)

ab56889 staining mitodusin2 in MEF1 cells treated with valinomycin from Streptomyces fulvissimus (ab120852), by ICC/IF. Decrease in mitofusin2 expression with increased concentration of withaferin valinomycin from Streptomyces fulvissimus, as described in literature.

The cells were incubated at 37°C for 3h in media containing different concentrations of ab120852 (valinomycin from Streptomyces fulvissimus) in DMSO, fixed with 100% methanol for 5 minutes at -20°C and blocked with PBS containing 10% goat serum, 0.3 M glycine, 1% BSA and 0.1% tween for 2h at room temperature. Staining of the treated cells with **ab56889** (10 µg/ml) was performed overnight at 4°C in PBS containing 1% BSA and 0.1% tween. A DyLight 488 goat anti-mouse polyclonal antibody (**ab96879**) at 1/250 dilution was used as the secondary antibody. Nuclei were counterstained with DAPI and are shown in blue.

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