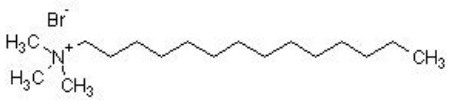
abcam

Product datasheet

MiTMAB™, dynamin I and dynamin II inhibitor ab120466

10 References 2 Images

Overview

Product name	MiTMAB™, dynamin I and dynamin II inhibitor
Description	Cell-permeable dynamin I and dynamin II inhibitor
Biological description	Cell-permeable dynamin I and dynamin II inhibitor (IC_{50} values are 3.1 and 8.4 µM for inhibition of dynamin I and dynamin II GTPase, respectively). Targets the pleckstrin homology (PH) (lipid binding) domain. Competitive with phospholipid and non-competitive with GTP. Inhibits receptor-mediated and synaptic vesicle endocytosis (IC_{50} values are 19.9 and 2.2 µM, respectively). Inhibits cancer cell growth.
General notes	Sold under exclusive licence from Children's Medical Research Institute and Newcastle Innovation Ltd. MiTMAB™ and OcTMAB™ are trademarks of Children's Medical Research Institute and Newcastle Innovation Ltd.
CAS Number	1119-97-7
Chemical structure	

Properties

Chemical name	Tetradecyltrimethylammonium bromide
Molecular weight	336.40
Molecular formula	$C_{17}H_{38}BrN$
PubChem identifier	14250
Storage instructions	Store at Room Temperature. Store under desiccating conditions. The product can be stored for up to 12 months.
Solubility overview	Soluble in water to 100 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 month. 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.

SMILES [Br-].C[N+](C)(C)CCCCCCCCCCCCCC

Source Synthetic

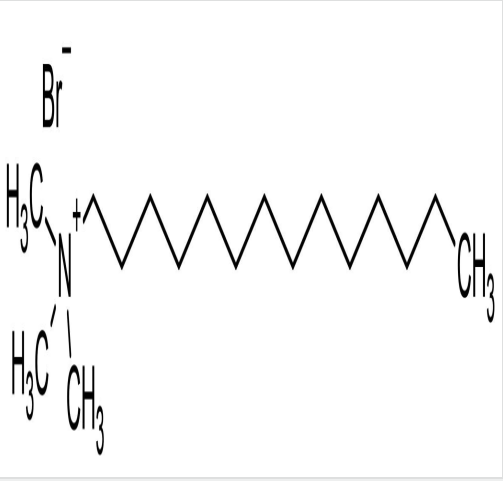
Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab120466 in the following tested applications.

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

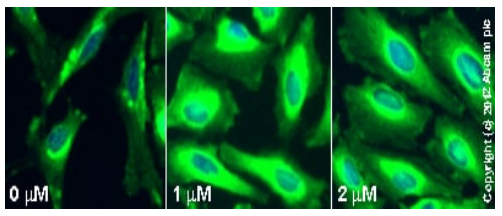
Application	Abreviews	Notes
Functional Studies		Use at an assay dependent concentration.

Images



Chemical Structure - MiTMAB™, dynamin I and dynamin II inhibitor (ab120466)

2D chemical structure image of ab120466, MiTMAB™, dynamin I and dynamin II inhibitor



Immunocytochemistry/ Immunofluorescence - MiTMAB™, dynamin I and dynamin II inhibitor (ab120466)

ab66705 staining PAI1 in HeLa cells treated with MiTMAB™ (ab120466), by ICC/IF. Increase in PAI1 expression correlates with increased concentration of MiTMAB™, as described in literature. The cells were incubated at 37°C for 24h in media containing different concentrations of ab120466 (MiTMAB™) 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 **ab66705** (5 µg/ml) was performed overnight at 4°C in PBS containing 1% BSA and 0.1% tween. A DyLight 488 goat anti-rabbit polyclonal antibody (**ab96899**) at 1/250 dilution was used as the

secondary antibody. Nuclei were counterstained with DAPI and are shown in blue.

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