

Dynamin Inhibitors Toolbox ab120468

[6 References](#) [4 Images](#)

Overview

Product name	Dynamin Inhibitors Toolbox
Specificity	<p>Convenient kit of dynamin inhibitors from the MiTMAB™ and Dynole™ chemical series. Used for characterization of dynamin and endocytosis. The inhibitors have different mechanisms of action, target different domains with varying potencies, and are based on differing chemical scaffolds. Inactive controls for each series are included. Toolbox contains 1mg of each of the following: MiTMAB™ (ab120466), OcTMAB™ (ab120467), Pro-Mystyric Acid (ab120476), Dynole-34-2™ (ab120463) and Dynole-31-2™ (ab120464).</p>
Product overview	<p>The Dynamin Inhibitors Toolbox (ab120468) is a unique collection of small molecule, potent, and cell permeable dynamin inhibitors, enabling characterization of dynamin and endocytosis. The inhibitors have different mechanisms of action, target different domains of dynamin, and are based on differing chemical scaffolds.</p> <p>Negative controls for each chemical series are included.</p> <p>The Toolbox contains 1mg of each of the following: MiTMAB™ (ab120466), OcTMAB™ (ab120467), Pro-Mystyric Acid (ab120476), Dynole-34-2™ (ab120463) and Dynole-31-2™ (ab120464).</p> <p>MiTMAB™ chemical series collection</p> <p>Contains MiTMAB™ (ab120466), OcTMAB™ (ab120467) and Pro-Myristic Acid (ab120476). OcTMAB™ and MiTMAB™ target dynamin at the lipid binding (PH) domain and inhibit dynamin and endocytosis in enzymatic and cell based assays. They are based on the same chemical scaffold.</p> <p>Pro-Myristic acid is an in vitro inhibitor of dynamin. Although cell permeable, it is rapidly broken down by cellular esterases to release intracellular myristic acid, which is not a dynamin inhibitor. It can therefore be used as a negative control in cell-based studies.</p> <p>Dynole™ chemical series collection</p> <p>Contains dynamin inhibitor Dynole-34-2™ (ab120463) and negative control Dynole-31™ (ab120464) from the Dynole chemical series. Dynole-34-2™ targets dynamin at the GTPase</p>

Allosteric Site (GAS) domain and inhibits dynamin and endocytosis in enzymatic and cell based assays. The inhibitor and negative control are based on the same chemical scaffold.

PH lipid binding site

MiTMAB™ - Cell-permeable dynamin I and dynamin II inhibitor

PH lipid binding site

OcTMAB™ - Cell permeable dynamin I and dynamin II inhibitor

PH lipid binding site

Pro-Myristic Acid - Negative control for MiTMAB™ and OcTMAB™

GTPase Allosteric Site

Dynole-34-2™ - Potent dynamin I and dynamin II inhibitor

GTPase Allosteric Site

Dynole-31-2™ - Negative control for Dynole 34-2™

Notes

Providing storage is as stated on the product vial and the vial is kept tightly sealed, the product can be stored for up to 6 months.

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.

Sold under exclusive licence from Children's Medical Research Institute and Newcastle Innovation Ltd. Dynole-34-2™, Dynole-31-2™, MiTMAB™ and OcTMAB™ are trademarks of Children's Medical Research Institute and Newcastle Innovation Ltd.

Tested applications

Suitable for: Functional Studies

Properties

Storage instructions Store at +4°C. Please refer to protocols.

Components	1 kit
<u>ab120464 - Dynole-31-2</u>	1 x 1mg
<u>ab120463 - Dynole-34-2</u>	1 x 1mg

Components	1 kit
ab120466 - MiTMAB	1 x 1mg
ab120467 - OcTMAB	1 x 1mg
ab120476 - Pro-Myristic Acid	1 x 1mg

Applications

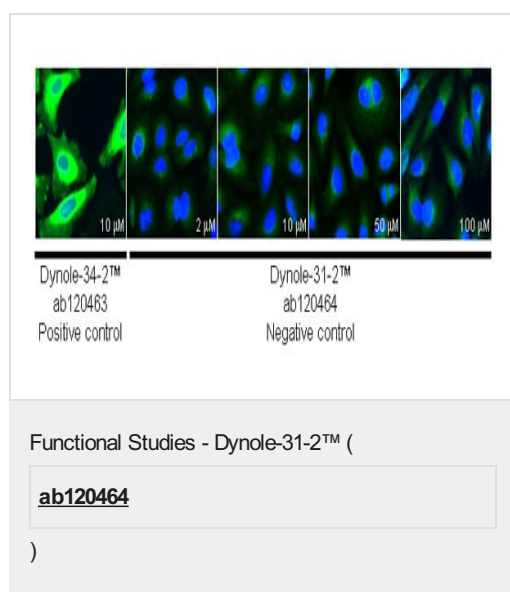
The Abpromise guarantee

Our [Abpromise guarantee](#) covers the use of ab120468 in the following tested applications.

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

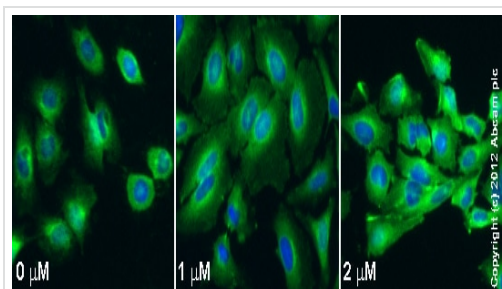
Application	Abreviews	Notes
Functional Studies		Use at an assay dependent concentration.

Images



[ab66705](#) staining PAI1 in HeLa cells treated with dynole-31-2™ ([ab120464](#)), by ICC/IF. No change in PAI1 expression with increased concentration of dynole-31-2™ (negative control for dynole 34-2™ ([ab120463](#)), as described in literature.

The cells were incubated at 37°C for 6h in media containing different concentrations of [ab120464](#) (dynole-31-2™) 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.

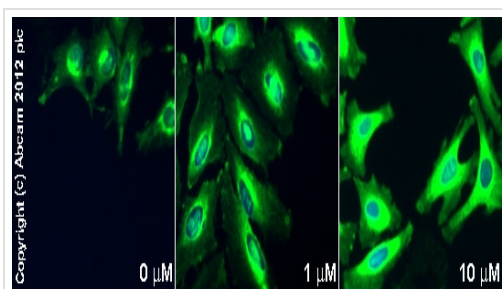


Functional Studies - OcTMAB™ (

[ab120467](#)

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ab66705 staining PAI1 in HeLa cells treated with OcTMAB™ (**ab120467**), by ICC/IF. Increase in PAI1 expression correlates with increased concentration of OcTMAB™, as described in literature. The cells were incubated at 37°C for 24h in media containing different concentrations of **ab120467** (OcTMAB™) 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.



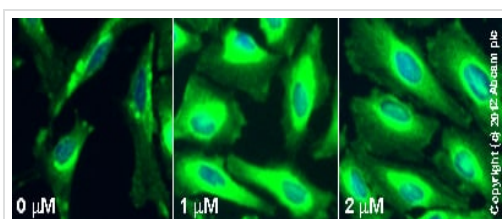
Functional Studies - Dynole-34-2™ (

[ab120463](#)

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ab66705 staining PAI1 in HeLa cells treated with dynole-34-2™; (**ab120463**), by ICC/IF. Increase in PAI1 expression correlates with increased concentration of dynole-34-2™, as described in literature.

The cells were incubated at 37°C for 24h in media containing different concentrations of **ab120463** (dynole-34-2™) 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.



Functional Studies - MiTMAB™ (

[ab120466](#)

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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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