

Product datasheet

Anti-Furin antibody [MM0298-4G31] ab89558

★★★★★ [1 Abreviews](#) [1 Image](#)

Overview

Product name	Anti-Furin antibody [MM0298-4G31]
Description	Mouse monoclonal [MM0298-4G31] to Furin
Host species	Mouse
Tested applications	Suitable for: Flow Cyt
Species reactivity	Reacts with: Human
Immunogen	Recombinant Human Furin
General notes	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
Storage buffer	Constituent: PBS
Purity	Protein G purified
Purification notes	The IgG fraction of culture supernatant was purified by Protein G affinity chromatography and filtered through a 0.2 µm filter.
Clonality	Monoclonal
Clone number	MM0298-4G31
Isotype	IgG1

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab89558 in the following tested applications.

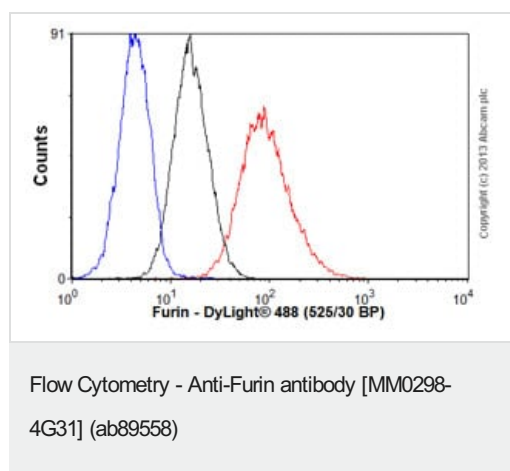
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt		Use 2µg for 10 ⁶ cells. ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.

Target

Function	Furin is likely to represent the ubiquitous endoprotease activity within constitutive secretory pathways and capable of cleavage at the RX(K/R)R consensus motif.
Tissue specificity	Seems to be expressed ubiquitously.
Sequence similarities	Belongs to the peptidase S8 family. Furin subfamily. Contains 1 homo B/P domain.
Domain	Contains a cytoplasmic domain responsible for its TGN localization and recycling from the cell surface.
Post-translational modifications	The inhibition peptide, which plays the role of an intramolecular chaperone, is autocatalytically removed in the endoplasmic reticulum (ER) and remains non-covalently bound to furin as a potent autoinhibitor. Following transport to the trans Golgi, a second cleavage within the inhibition propeptide results in propeptide dissociation and furin activation. Phosphorylation is required for TGN localization of the endoprotease. In vivo, exists as di-, mono- and non-phosphorylated forms.
Cellular localization	Golgi apparatus > trans-Golgi network membrane. Cell membrane. Shuttles between the trans-Golgi network and the cell surface. Propeptide cleavage is a prerequisite for exit of furin molecules out of the endoplasmic reticulum (ER). A second cleavage within the propeptide occurs in the trans Golgi network (TGN), followed by the release of the propeptide and the activation of furin.

Images



Overlay histogram showing HeLa cells stained with ab89558 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab89558, 1µg/1x10⁶ cells) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) (**ab96879**) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG1 [ICIGG1] (**ab91353**, 2µg/1x10⁶ cells) used under the same conditions. Unlabelled sample (blue line). Acquisition of >5,000 events were collected using a 20mW Argon ion laser (488nm) and 525/30 bandpass filter.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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