

## Product datasheet

# Anti-Furin antibody [MM0298-4G31] ab89558

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### Overview

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<b>Product name</b>	Anti-Furin antibody [MM0298-4G31]
<b>Description</b>	Mouse monoclonal [MM0298-4G31] to Furin
<b>Host species</b>	Mouse
<b>Tested applications</b>	<b>Suitable for:</b> Flow Cyt
<b>Species reactivity</b>	<b>Reacts with:</b> Human
<b>Immunogen</b>	Recombinant Human Furin
<b>General notes</b>	<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&amp;As</p>

### Properties

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

### Applications

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**The Abpromise guarantee** Our [Abpromise guarantee](#) covers the use of ab89558 in the following tested applications.

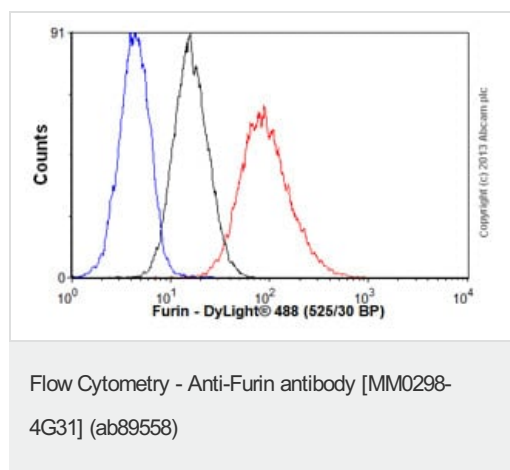
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt		Use 2µg for 10 <sup>6</sup> cells. <a href="#">ab170190</a> - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.

## Target

<b>Function</b>	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.
<b>Tissue specificity</b>	Seems to be expressed ubiquitously.
<b>Sequence similarities</b>	Belongs to the peptidase S8 family. Furin subfamily. Contains 1 homo B/P domain.
<b>Domain</b>	Contains a cytoplasmic domain responsible for its TGN localization and recycling from the cell surface.
<b>Post-translational modifications</b>	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.
<b>Cellular localization</b>	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/1x10<sup>6</sup> 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/1x10<sup>6</sup> 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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- Response to your inquiry within 24 hours
  
- We provide support in Chinese, English, French, German, Japanese and Spanish
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