

Furin peptide **ab4989**

Description

Product name	Furin peptide
Purity	> 95 % HPLC. Peptides are analyzed by Reverse-Phase HPLC (RP-HPLC) in order to determine purity. Identities are confirmed by MALDI-MS.
Animal free	No
Nature	Synthetic

Specifications

Our **Abpromise guarantee** covers the use of **ab4989** in the following tested applications.

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

Applications	Blocking
Form	Lyophilized
Additional notes	This peptide may be used for neutralization and control experiments with the polyclonal antibody that reacts with this product and furin convertase, catalog ab3467 . Using a solution with equal weights per unit volume of peptide and corresponding antibody will yield a solution with a large molar excess of peptide that is able to competitively bind the antibody.

Preparation and Storage

Stability and Storage	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Reconstitution	>95% pure, lyophilized synthetic peptide. Reconstitute with 0.1 ml of distilled water.

General Info

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	<p>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.</p> <p>Phosphorylation is required for TGN localization of the endoprotease. In vivo, exists as di-, mono- and non-phosphorylated forms.</p>
Cellular localization	<p>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.</p>

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

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