10320 Camino Santa Fe, Suite G
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Anti-Furin Picoband Antibody
Catalog # ABO11874

Specification

Anti-Furin Picoband Antibody - Product Information

Application	**WB**
Primary Accession	P09958
Host	**Rabbit**
Reactivity	**Human**
Clonality	**Polyclonal**
Format	**Lyophilized**

Description
Rabbit IgG polyclonal antibody for Furin(FURIN) detection. Tested with WB in Human.

Reconstitution
Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-Furin Picoband Antibody - Additional Information

Gene ID 5045

Other Names
Furin, 3.4.21.75, Dibasic-processing enzyme, Paired basic amino acid residue-cleaving enzyme, PACE, FURIN, FUR, PACE, PCSK3

Calculated MW
86678 MW KDa

Application Details
Western blot, 0.1-0.5 µg/ml, Human

Subcellular Localization
Golgi apparatus, trans-Golgi network membrane; Single-pass type I membrane protein. Cell membrane; Single-pass type I membrane protein. 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.

Tissue Specificity
Seems to be expressed ubiquitously.

Protein Name
Furin

Contents
Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen
E.coli-derived human Furin recombinant protein (Position: T591-L794). Human Furin shares 88%

amino acid (aa) sequence identity with both mouse and rat Furin.

Purification
Immunogen affinity purified.

Cross Reactivity
No cross reactivity with other proteins

Storage	**At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.**

Sequence Similarities
Belongs to the peptidase S8 family. Furin subfamily.

Anti-Furin Picoband Antibody - Protein Information

Name FURIN {ECO:0000303|PubMed:7690548, ECO:0000312|HGNC:HGNC:8568}

Function
Ubiquitous endoprotease within constitutive secretory pathways capable of cleavage at the RX(K/R)R consensus motif (PubMed:11799113, PubMed:1629222, PubMed:1713771, PubMed:2251280, PubMed:24666235, PubMed:25974265, PubMed:7592877, PubMed:7690548, PubMed:9130696). Mediates processing of TGFB1, an essential step in TGF-beta-1 activation (PubMed:7737999). Converts through proteolytic cleavage the non-functional Brain natriuretic factor prohormone into its active hormone BNP(1-32) (PubMed:20489134, PubMed:21763278). By mediating processing of accessory subunit ATP6AP1/Ac45 of the V-ATPase, regulates the acidification of dense-core secretory granules in islets of Langerhans cells (By similarity).

Cellular Location
Golgi apparatus, trans-Golgi network membrane; Single-pass type I membrane protein. Cell membrane; Single-pass type I membrane protein. Secreted. Endosome membrane; Single-pass type I membrane protein. Note=Shuttles between the trans-Golgi network and the cell surface (PubMed:11799113, PubMed:9412467). 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 (PubMed:11799113)

Tissue Location
Seems to be expressed ubiquitously.

Anti-Furin Picoband Antibody - Protocols

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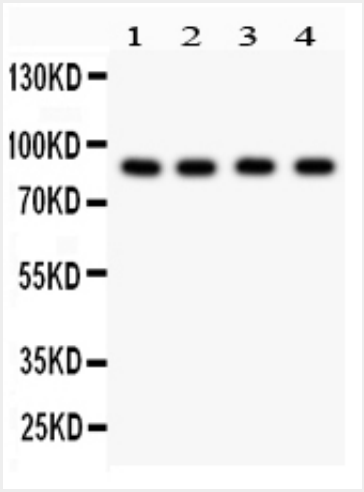
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-Furin Picoband Antibody - Images

Anti- Furin Picoband antibody, ABO11874, Western blottingAll lanes: Anti Furin (ABO11874) at 0.5ug/mlWB: Recombinant Human Furin Protein 0.5ngPredicted bind size: 40KDObserved bind size: 40KD



Anti- Furin Picoband antibody, ABO11874, Western blottingAll lanes: Anti Furin (ABO11874) at 0.5ug/mlLane 1: Hela Whole Cell Lysate at 40ugLane 2: MCF-7 Whole Cell Lysate at 40ugLane 3: Colo320 Whole Cell Lysate at 40ugLane 4: SW620 Whole Cell Lysate at 40ugPredicted bind size: 87KD Observed bind size: 87KD

Anti-Furin Picoband Antibody - Background

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Furin(Fur), also known as PACE, is a protein that in humans is encoded by the FURIN gene. The protein encoded by this gene is an enzyme which belongs to the subtilisin-like proprotein convertase family. The Furin gene is located approximately 1 kb upstream of the FES gene on chromosome 15q25-q26. This gene is thought to play a role in tumor progression. Furin is one of the proteases responsible for the proteolytic cleavage of HIV envelope polyprotein precursor gp160 to gp120 and gp41 prior to viral assembly. Furin is enriched in the Golgi apparatus, where it functions to cleave other proteins into their mature/active forms. Expression of furin in T-cells is required for maintenance of peripheral immune tolerance.