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Anti-Furin Picoband Antibody

Catalog # ABO11874

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.

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
Application Details	Western blot, 0.1-0.5 □g/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.
Source	Eukaryota
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.

Protein Information

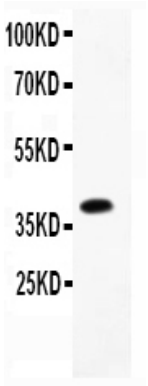
Name	FURIN {ECO:0000303|PubMed:7690548, ECO:0000312|HGNC:HGNC:8568}
Function	Ubiquitous endoprotease within constitutive secretory pathways capable of cleavage at the RX(K/R)R consensus motif (PubMed:11799113, PubMed:1629222, PubMed:1713771, PubMed:2251280, PubMed:24666235, PubMed:25974265, PubMed:7592877, 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.

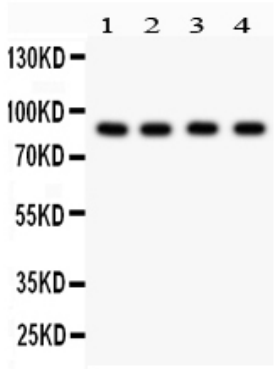
Background

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.

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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.