



FURIN Monoclonal Antibody

Catalog No	YP-mAb-07245
Isotype	IgG
Reactivity	Human;Rat;Mouse
Applications	WB
Gene Name	FURIN FUR PACE PCSK3
Protein Name	Furin (EC 3.4.21.75) (Dibasic-processing enzyme) (Paired basic amino acid residue-cleaving enzyme) (PACE)
Immunogen	Synthesized peptide derived from human protein . at AA range: 340-420
Specificity	FURIN Monoclonal Antibody detects endogenous levels of protein.
Formulation	Liquid in PBS containing 50% glycerol, and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	
Observed Band	87kD
Cell Pathway	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 . Shuttles between the trans-Golgi network and the cell surface (PubMed:9412467, PubMed:11799113). 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 Specificity	Seems to be expressed ubiquitously.
Function	catalytic activity:Release of mature proteins from their proproteins by cleavage of -Arg-Xaa-Yaa-Arg- -Zaa- bonds, where Xaa can be any amino acid and Yaa is Arg or Lys. Releases albumin, complement component C3 and vWF from their respective precursors.,cofactor:Calcium.,domain:Contains a cytoplasmic domain responsible for its TGN localization and recycling from the cell surface.,enzyme regulation:Could be inhibited by the not secondly cleaved propeptide.,function:Furin is likely to represent the ubiquitous endoprotease activity within constitutive secretory pathways and caMABLE of cleavage at the RX(K/R)R consensus motif.,PTM:Phosphorylation is required for TGN localization



of the endoprotease. In vivo, exists as di-, mono- and non-phosphorylated forms.,PTM:The inhibition peptide, which plays the role of an intramolecular chaperone, is autocatalytically removed in the endoplasmic reticu

Background

This gene encodes a member of the subtilisin-like proprotein convertase family, which includes proteases that process protein and peptide precursors trafficking through regulated or constitutive branches of the secretory pathway. It encodes a type 1 membrane bound protease that is expressed in many tissues, including neuroendocrine, liver, gut, and brain. The encoded protein undergoes an initial autocatalytic processing event in the ER and then sorts to the trans-Golgi network through endosomes where a second autocatalytic event takes place and the catalytic activity is acquired. The product of this gene is one of the seven basic amino acid-specific members which cleave their substrates at single or paired basic residues. Some of its substrates include parathyroid hormone, transforming growth factor beta 1 precursor, proalbumin, pro-beta-secretase, membrane type-1 matrix m

matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images