
Product Name: KD-Validated FURIN Recombinant Rabbit Monoclonal Antibody**Catalog #: KVA01673**

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1,000-1:5,000; FC 1:200-1:2,000; ICC 1:100-1:1,000
Molecular Weight	Calculated MW: 86.7kDa

Antigen Information

Gene Name	FURIN FURIN; Furin, Paired Basic Amino Acid Cleaving Enzyme; PCSK3; SPC1; PACE; FUR; Paired Basic Amino Acid Residue-Cleaving Enzyme 3; Proprotein Convertase Subtilisin/Kexin 3; Subtilisin-Like Proprotein Convertase 1; EC 3.4.21.75; Furin; Paired Basic Amino Acid Cleaving Enzyme (Furin, Membrane Associated Receptor Protein); Furin (Paired Basic Amino Acid Cleaving Enzyme); Proprotein Convertase Subtilisin/Kexin Type 3; Furin, Membrane Associated Receptor Protein; Dibasic Processing Enzyme; Dibasic-Processing Enzyme; FES Upstream Region; EC 3.4.21
Alternative Names	
Gene ID	5045.0
SwissProt ID	P09958
Immunogen	A synthesized peptide derived from human Furin

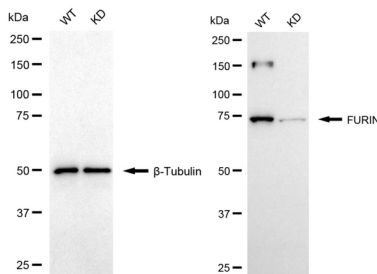
Background

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. Like other members of this convertase family, the product of this gene specifically cleaves 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 metalloproteinase, beta subunit of pro-nerve growth factor and von Willebrand factor. It is thought to be one of the proteases responsible for the activation of HIV envelope glycoproteins gp160 and gp140, and may play a role in tumor progression. Unlike SARS-CoV and other coronaviruses, the spike protein of SARS-CoV-2 is thought to be uniquely cleaved by this protease. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Aug 2020]

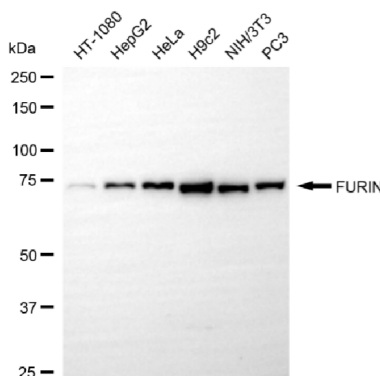
Research Area

Signal Transduction, Cell Biology

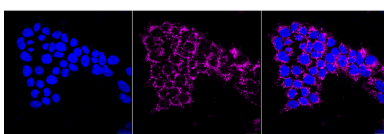
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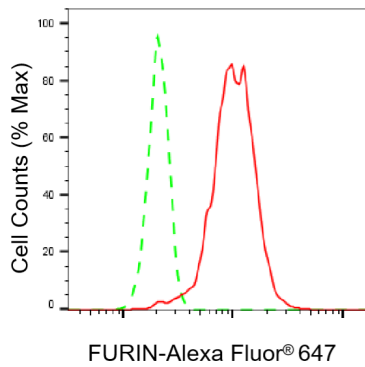
Western blotting analysis using FURIN antibody (KVA01673). FURIN expression in wild-type (WT) and FURIN knockdown (KD) HeLa cells with 20 µg of total cell lysates. β -Tubulin serves as a loading control. The blot was incubated with FURIN antibody (KVA01673, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Western blotting analysis using FURIN antibody (KVA01673). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with FURIN antibody (KVA01673, 1:5,000) and HRP-conjugated goat anti rabbit secondary antibody (APS0635, 1:10,000) respectively.



Immunocytochemical staining of HeLa cells with FURIN antibody (KVA01673, 1:1,000). Nuclei were stained blue with DAPI; FURIN was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser intensity and smart gain: Medium. Scale bar, 20 µm.



Flow cytometric analysis of FURIN expression in HeLa cells using FURIN antibody (KVA01673, 1:2,000). Green, isotype control; red, FURIN.