abcam

ab324440

Anti-FURIN antibody [RM2083]

Recombinant | RabMAb | 20ul selling size

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Multiclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	RM2083
Purification technique	Affinity purification Protein A
Concentration	0.5 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

Dot

Tested

Species	Recombinant fragment - Human
Dilution info	1/1000
Notes	-

Expected

Species	Human
Dilution info	Use at an assay dependent concentration.
Notes	-

Not recommended

Species	Mouse, Rat
Dilution info	-
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	1/50
Notes	-

Not recommended

Species	Mouse, Rat, Recombinant fragment - Human
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/50
Notes	-

Not recommended

Species	Mouse, Rat, Recombinant fragment - Human

Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	1/1000
Notes	-

Not recommended

Species	Mouse, Rat, Recombinant fragment - Human
Dilution info	-
Notes	-

IHC-P

Not recommended

Species	Human, Mouse, Rat, Recombinant fragment - Human
Dilution info	-
Notes	-

Target data

See full target information FURIN

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). (Microbial infection) Cleaves and activates diphtheria toxin DT. (Microbial infection) Cleaves and activates anthrax toxin protective antigen (PA). (Microbial infection) Cleaves and activates HIV-1 virus

Envelope glycoprotein gp160. (Microbial infection) Required for H7N1 and H5N1 influenza virus infection probably by cleaving hemagglutinin. (Microbial infection) Able to cleave S.pneumoniae serine-rich repeat protein PsrP. (Microbial infection) Facilitates human coronaviruses EMC and SARS-CoV-2 infections by proteolytically cleaving the spike protein at the monobasic S1/S2 cleavage site. This cleavage is essential for spike protein-mediated cell-cell fusion and entry into human lung cells. (Microbial infection) Facilitates mumps virus infection by proteolytically cleaving the viral fusion protein F.

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Notes

Patented technology
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

What are recombinant multiclonals?
Recombinant multiclonals are a mixture of recombinant antibodies co-expressed from a library of heavy and light chains. They offer several advantages including:

- The sensitivity of polyclonal antibodies by recognising multiple epitopes
- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free batch production

View our range of recombinant multiclonal antibodies.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

We do not recommend this combination. It is not covered by our product promise.

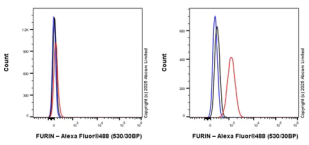
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

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5 product images



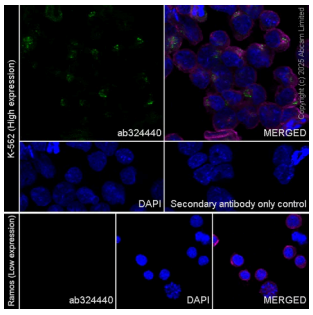
Flow Cytometry (Intracellular) - Anti-FURIN antibody [RM2083] (ab324440)

FURIN Flow Cytometry (Intracellular) staining using rabbit Anti-FURIN antibody

Flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized K-562 (human chronic myelogenous leukemia lymphoblast) (Right) / Ramos (human Burkitt's lymphoma B lymphocyte) (Left) cells labelling FURIN with ab324440 at 1/50 dilution (1ug) (Red) compared with a Rabbit monoclonal IgG (ab172730) (Black) isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody).

Goat Anti-Rabbit IgG (Alexa Fluor® 488, ab150081) at 1/5000 dilution was used as the secondary antibody.

Low expression: Ramos.



Immunocytochemistry/ Immunofluorescence - Anti-FURIN antibody [RM2083] (ab324440)

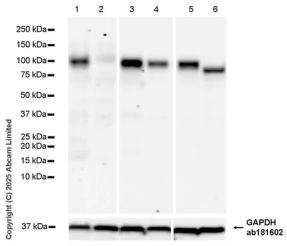
FURIN Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-FURIN antibody

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized K-562 (human chronic myelogenous leukemia lymphoblast) cells labelling FURIN with ab324440 at 1/50 (10.0 ug/ml) dilution, followed by ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed antibody at 1/1000 dilution (Green).

Confocal image showing cytoplasmic staining in K-562 and no staining in Ramos cell line (shown in green). The counterstain was observed in magenta. Nuclear DNA was labelled with DAPI (shown in blue).
Low expression: Ramos.
Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).

ab195889 Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 dilution (Magenta). The Nuclear counterstain was DAPI (Blue).

Secondary antibody only control: Secondary antibody is ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 dilution.



Western blot - Anti-FURIN antibody [RM2083] (ab324440)

FURIN Western blot staining using rabbit Anti-FURIN antibody

Blocking and diluting buffer and concentration: 5% NFDM/TBST.

Low expression: Ramos (PMID: 7931173).

In Western blot, Anti-GAPDH antibody [EPR16891] - Loading Control (ab181602) staining at 1/200000 dilution.

Exposure time: Lane 1, 2: 103 seconds Lane 3-6: 37 seconds

All lanes:
Western blot - Anti-FURIN antibody [RM2083] (ab324440) at 1/1000 dilution

Lane 1:
K-562 (human chronic myelogenous leukemia lymphoblast) whole cell lydate at 40 µg

Lane 2:
Ramos (human Burkitt's lymphoma B lymphocyte) whole cell lydate at 40 µg

Lane 3:
KARPAS-299 (human T cell lymphoma cell) whole cell lydate at 40 µg

Lane 4:
HEK-293 (human embryonic kidney epithelial cell) whole cell lydate at 40 µg

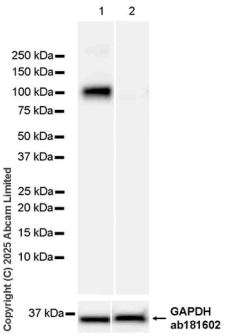
Lane 5:
Untreated KARPAS-299 whole cell lydate at 40 µg

Lane 6:
KARPAS-299 treated with Protein Deglycosylation MIX II at 40 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Observed band size: 85 kDa, 36 kDa



Western blot - Anti-FURIN antibody [RM2083] (ab324440)

FURIN Western blot staining using rabbit Anti-FURIN antibody

Blocking and diluting buffer and concentration: 5% NFDM/TBST.

Low expression: Human lung.

In Western blot, Anti-GAPDH antibody [EPR16891] - Loading Control (ab181602) staining at 1/200000 dilution.

All lanes:
Western blot - Anti-FURIN antibody [RM2083] (ab324440) at 1/1000 dilution

Lane 1:
Human placenta tissue lysate at 20 µg

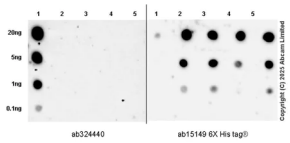
Lane 2:
Human lung tissue lysate at 40 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Observed band size: 85 kDa, 36 kDa

Exposure time: 26s



Dot Blot - Anti-FURIN antibody [RM2083] (ab324440)

FURIN Dot Blot staining using rabbit Anti-FURIN antibody

Dot blot analysis of FURIN using ab324440 at 1:1000 (0.5 ug/ml) followed by a Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ab97051) at 1:100,000 dilution.

Lane1: No-tagged human PCSK3 recombinant protein
Lane2: His-tagged human PCSK1 recombinant protein
Lane3: His-tagged human PCSK4 recombinant protein
Lane4: His-tagged human PCSK5 recombinant protein
Lane5: His-tagged human PCSK6 recombinant protein

Exposure time: 180 seconds.

Blocking and diluting buffer and concentration: 5% NFDM/TBST.

This antibody does not cross-react with human PCSK1, PCSK4, PCSK5, and PCSK6.

In Dot blot, anti-6X His tag® antibody [AD1.1.10] (ab15149) staining at 1/1000 dilution.

All lanes:
Dot Blot - Anti-FURIN antibody [RM2083] (ab324440) at 1/1000 dilution

Lane 1:
No-tagged human PCSK3 recombinant protein

Lane 2:
His-tagged human PCSK1 recombinant protein

Lane 3:
His-tagged human PCSK4 recombinant protein

Lane 4:
His-tagged human PCSK5 recombinant protein

Lane 5:
His-tagged human PCSK6 recombinant protein

Secondary

All lanes:
Dot Blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Exposure time: 180s

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