

Product datasheet

Anti-KCNMB3 antibody [EPR9543(B)] ab137041

Recombinant **RabMAb**

[3 References](#) [3 Images](#)

Overview

Product name	Anti-KCNMB3 antibody [EPR9543(B)]
Description	Rabbit monoclonal [EPR9543(B)] to KCNMB3
Host species	Rabbit
Tested applications	Suitable for: Flow Cyt (Intra), WB Unsuitable for: ICC/IF, IHC-P or IP
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	BxPC3, HepG2, C6, RAW 264.7, PC12 and NIH 3T3 cell lysates; HeLa cells
General notes	This product is a recombinant monoclonal antibody, which offers several advantages including: <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production For more information see here . Our RabMAb [®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents .

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture supernatant
Purity	Tissue culture supernatant
Clonality	Monoclonal
Clone number	EPR9543(B)
Isotype	IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab137041 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt (Intra)		1/10 - 1/100. ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
WB		1/1000 - 1/10000. Detects a band of approximately 29 - 32 kDa (predicted molecular weight: 32 kDa).

Application notes

Is unsuitable for ICC/IF, IHC-P or IP.

Target

Function

Regulatory subunit of the calcium activated potassium KCNMA1 (maxiK) channel. Modulates the calcium sensitivity and gating kinetics of KCNMA1, thereby contributing to KCNMA1 channel diversity. Alters the functional properties of the current expressed by the KCNMA1 channel. Isoform 2, isoform 3 and isoform 4 partially inactivate the current of KCNBMA. Isoform 4 induces a fast and incomplete inactivation of KCNMA1 channel that is detectable only at large depolarizations. In contrast, isoform 1 does not induce detectable inactivation of KCNMA1. Two or more subunits of KCNMB3 are required to block the KCNMA1 tetramer.

Tissue specificity

Isoform 1, isoform 3 and isoform 4 are widely expressed. Isoform 2 is expressed placenta, pancreas, kidney and heart. Isoform 1 and isoform 3 are highly expressed in pancreas and testis.

Sequence similarities

Belongs to the KCNMB (TC 8.A.14.1) family. KCNMB3 subfamily.

Domain

Isoform 4 cytoplasmic N-terminal domain participates in the partial inactivation of KCNMA1, possibly by binding to a receptor site.
The extracellular domain forms gates to block ion permeation, providing a mechanism by which current can be rapidly diminished upon cellular repolarization.

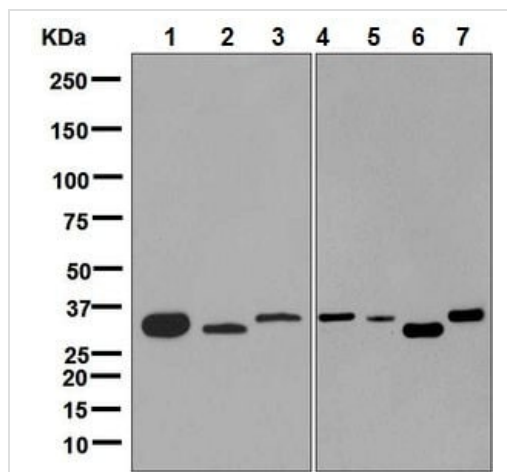
Post-translational modifications

N-glycosylated.
The extracellular domain contains disulfide bond essential for the gating mechanism.

Cellular localization

Membrane.

Images



Western blot - Anti-KCNMB3 antibody [EPR9543(B)] (ab137041)

All lanes : Anti-KCNMB3 antibody [EPR9543(B)] (ab137041) at 1/1000 dilution

Lane 1 : BxPC3 cell lysate

Lane 2 : HepG2 cell lysate

Lane 3 : HeLa cell lysate

Lane 4 : C6 cell lysate

Lane 5 : RAW 264.7 cell lysate

Lane 6 : PC12 cell lysate

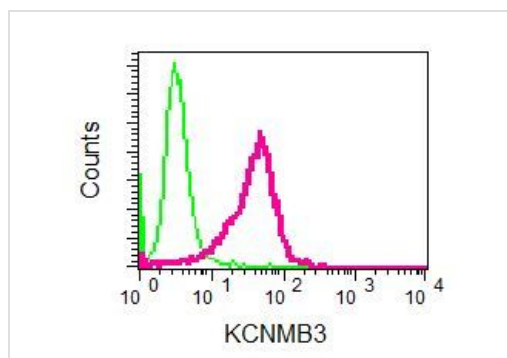
Lane 7 : NIH 3T3 cell lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : HRP conjugated Goat anti Rabbit IgG at 1/2000 dilution

Predicted band size: 32 kDa



Flow Cytometry (Intracellular) - Anti-KCNMB3 antibody [EPR9543(B)] (ab137041)

Intracellular Flow Cytometry analysis of permeabilized HeLa cells labelling KCNMB3 with ab137041 at 1/10 dilution (Red) or a Rabbit IgG (negative control) (Green).

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-KCNMB3 antibody [EPR9543(B)] (ab137041)

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