

## Product datasheet

# Anti-Nicastrin antibody [EPR2575Y] ab68145

**KO VALIDATED** Recombinant RabMAB

[1 References](#) [4 Images](#)

### Overview

<b>Product name</b>	Anti-Nicastrin antibody [EPR2575Y]
<b>Description</b>	Rabbit monoclonal [EPR2575Y] to Nicastrin
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB <b>Unsuitable for:</b> ICC/IF or IHC-P
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat, Human
<b>Immunogen</b>	Synthetic peptide within Human Nicastrin aa 650-750 (C terminal). The exact sequence is proprietary.
<b>Positive control</b>	WB: HEK293T, HeLa, Jurkat and HL-60 cell lysates; C6 cell lysate; Neuro-2a cell lysate; U-87 MG and SH-SY5Y cell lysates.
<b>General notes</b>	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"><li>- High batch-to-batch consistency and reproducibility</li><li>- Improved sensitivity and specificity</li><li>- Long-term security of supply</li><li>- Animal-free production</li></ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAB<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAB<sup>®</sup> patents</a>.</p>

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
<b>Storage buffer</b>	pH: 7.2 Preservative: 0.05% Sodium azide Constituents: 0.1% BSA, 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% Tissue culture supernatant
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR2575Y

Isotype

IgG

## Applications

### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab68145 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
WB		1/1000 - 1/2000. Detects a band of approximately 100-120, 130-160 kDa (predicted molecular weight: 78 kDa).

### Application notes

Is unsuitable for ICC/IF or IHC-P.

## Target

### Function

Essential subunit of the gamma-secretase complex, an endoprotease complex that catalyzes the intramembrane cleavage of integral membrane proteins such as Notch receptors and APP (beta-amyloid precursor protein). It probably represents a stabilizing cofactor required for the assembly of the gamma-secretase complex.

### Tissue specificity

Widely expressed.

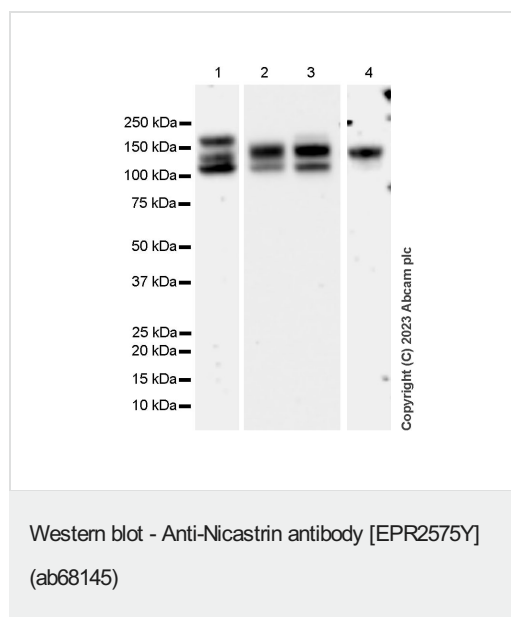
### Sequence similarities

Belongs to the nicastrin family.

### Cellular localization

Membrane. Melanosome. Identified by mass spectrometry in melanosome fractions from stage I to stage IV.

## Images



**All lanes** : Anti-Nicastrin antibody [EPR2575Y] (ab68145) at 1/1000 dilution

**Lane 1** : C6 (rat glial tumor glial cell) whole cell lysate

**Lane 2** : Neuro-2a (mouse neuroblastoma neuroblast) whole cell lysate

**Lane 3** : U-87 MG (human glioblastoma-astrocytoma epithelial cell) whole cell lysate

**Lane 4** : SH-SY5Y (human neuroblastoma epithelial cell) whole cell lysate

Lysates/proteins at 20 µg per lane.

### Secondary

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

**Predicted band size:** 78 kDa

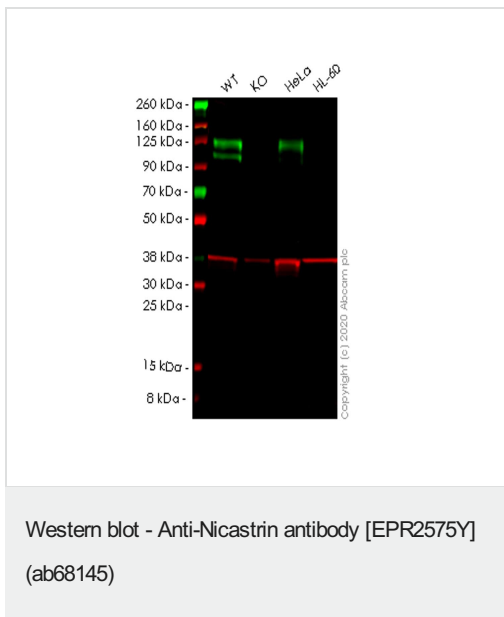
**Observed band size:** 100-140 kDa

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

Exposure time: Lane 1, 4: 180 seconds; Lane 2, 3: 15 seconds.

The bands observed is consistency with literature (PMID: 15322084).

The lysates were freshly made and used for Western Blotting immediately to minimize protein degradation.



**All lanes :** Anti-Nicastrin antibody [EPR2575Y] (ab68145) at 1/1000 dilution

**Lane 1 :** Wild-type HEK293T cell lysate

**Lane 2 :** NCSTN knockout HEK293T cell lysate

**Lane 3 :** HeLa cell lysate

**Lane 4 :** HL-60 cell lysate

Lysates/proteins at 20 µg per lane.

### Secondary

**All lanes :** Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed ([ab216773](#)) at 1/10000 dilution

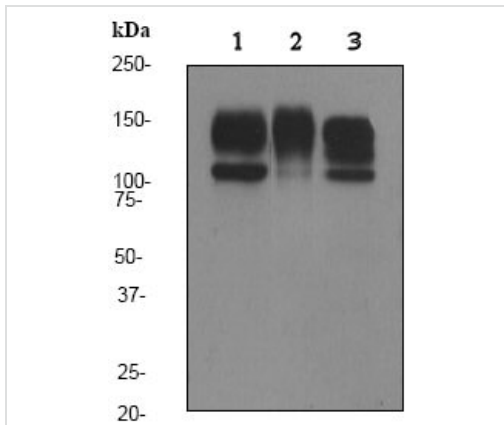
**Predicted band size:** 78 kDa

**Observed band size:** 100-125 kDa

**Lanes 1-4:** Merged signal (red and green). Green - ab68145 observed at 100-125 kDa. Red - loading control [ab8245](#) observed at 36 kDa.

ab68145 Anti-Nicastrin antibody [EPR2575Y] was shown to specifically react with Nicastrin in wild-type HEK293T cells. Loss of signal was observed when knockout cell line [ab266602](#) (knockout cell lysate [ab258061](#)) was used. Wild-type and Nicastrin knockout samples were subjected to SDS-PAGE. ab68145 and Anti-GAPDH antibody [6C5] - Loading Control ([ab8245](#)) were incubated overnight at 4°C at 1 in 1000 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed ([ab216773](#)) and Goat anti-Mouse

IgG H&L (IRDye® 680RD) preadsorbed (**ab216776**) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-Nicastrin antibody [EPR2575Y] (ab68145)

**All lanes** : Anti-Nicastrin antibody [EPR2575Y] (ab68145) at 1/1000 dilution

**Lane 1** : HeLa cell lysate

**Lane 2** : HL-60 cell lysate

**Lane 3** : Jurkat cell lysate

Lysates/proteins at 10 µg per lane.

#### Secondary

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

**Predicted band size:** 78 kDa

**Additional bands at:** 100-120 kDa (possible isoform), 130-160 kDa (possible isoform)

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-Nicastrin antibody [EPR2575Y] (ab68145)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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