

## Product datasheet

### Anti-SNAP25 antibody [EP3274] ab108990

KO **VALIDATED** Recombinant RabMAb

★★★★★ [2 Abreviews](#) [9 References](#) [9 Images](#)

#### Overview

<b>Product name</b>	Anti-SNAP25 antibody [EP3274]
<b>Description</b>	Rabbit monoclonal [EP3274] to SNAP25
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB, IHC-P <b>Unsuitable for:</b> Flow Cyt or IP
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat, Human
<b>Immunogen</b>	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	Fetal brain, HeLa, SH-SY5Y, U87-MG, fetal hippocampus, fetal cerebellum, and Neuro-2a cell lysates; Human brain tissue; Human cerebellum tissue, mouse and rat brain tissue lysate.
<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. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Stable for 12 months at -20°C.
<b>Storage buffer</b>	pH: 7.20 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>	EP3274

Isotype

IgG

## Applications

### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab108990 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 - 1/10000. Detects a band of approximately 25 kDa (predicted molecular weight: 23 kDa).
IHC-P	★★★★★ (2)	1/100 - 1/250. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. Antigen retrieval is recommended.

### Application notes

Is unsuitable for Flow Cyt or IP.

## Target

### Function

t-SNARE involved in the molecular regulation of neurotransmitter release. May play an important role in the synaptic function of specific neuronal systems. Associates with proteins involved in vesicle docking and membrane fusion. Regulates plasma membrane recycling through its interaction with CENPF.

### Tissue specificity

Neurons of the neocortex, hippocampus, piriform cortex, anterior thalamic nuclei, pontine nuclei, and granule cells of the cerebellum.

### Sequence similarities

Belongs to the SNAP-25 family.  
Contains 2 t-SNARE coiled-coil homology domains.

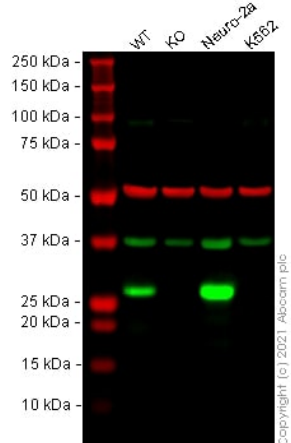
### Post-translational modifications

Palmitoylated. Cys-85 appears to be the main site, and palmitoylation is required for membrane association.

### Cellular localization

Cytoplasm > perinuclear region. Cell membrane. Cell junction > synapse > synaptosome. Membrane association requires palmitoylation. Expressed throughout cytoplasm, concentrating at the perinuclear region.

## Images



Western blot - Anti-SNAP25 antibody [EP3274]  
(ab108990)

**All lanes** : Anti-SNAP25 antibody [EP3274] (ab108990) at 1/1000 dilution

**Lane 1** : Wild-type SH-SY5Y cell lysate

**Lane 2** : SNAP25 knockout SH-SY5Y cell lysate

**Lane 3** : Neuro-2a cell lysate

**Lane 4** : K562 cell lysate

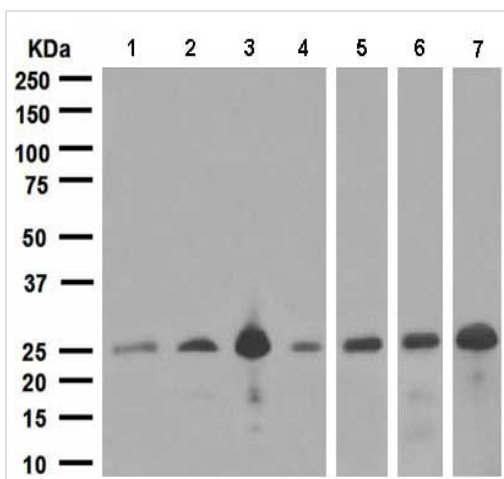
Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

**Predicted band size:** 23 kDa

**Observed band size:** 27 kDa

False colour image of Western blot: Anti-SNAP25 antibody [EP3274] staining at 1/1000 dilution, shown in green; loading control **ab7291** (Mouse anti-Alpha Tubulin [DM1A]) staining at 1/20000 dilution, shown in red. In Western blot, ab108990 was shown to bind specifically to SNAP25. A band was observed at 27 kDa in wild-type SH-SY5Y cell lysates with no signal observed at this size in SNAP25 knockout cell line **ab280041** (knockout cell lysate **ab280100**). To generate this image, wild-type and SNAP25 knockout SH-SY5Y cell lysates were analysed. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in 3 % milk in TBS-0.1 % Tween® 20 (TBS-T) before incubation with primary antibodies overnight at 4 °C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times then imaged. Secondary antibodies used were Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed (**ab216776**) at 1/20000 dilution.



Western blot - Anti-SNAP25 antibody [EP3274]  
(ab108990)

**All lanes :** Anti-SNAP25 antibody [EP3274] (ab108990) at 1/1000 dilution

**Lane 1 :** Fetal brain lysate

**Lane 2 :** HeLa cell lysate

**Lane 3 :** SH-SY5Y cell lysate

**Lane 4 :** U87-MG cell lysate

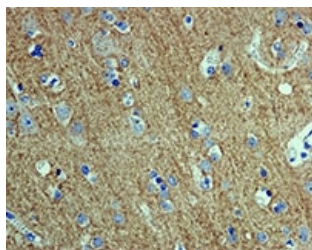
**Lane 5 :** Fetal hippocampus lysate

**Lane 6 :** Fetal cerebellum lysate

**Lane 7 :** Neuro-2a cell lysate

Lysates/proteins at 10 µg per lane.

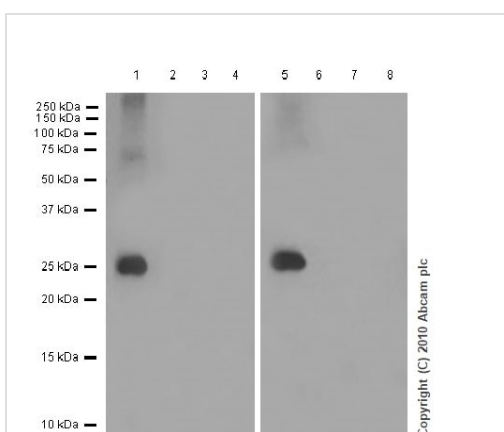
**Predicted band size:** 23 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SNAP25 antibody [EP3274] (ab108990)

ab108990, at 1/100 dilution, staining SNAP25 in paraffin-embedded Human brain tissue by Immunohistochemistry.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Western blot - Anti-SNAP25 antibody [EP3274]  
(ab108990)

**All lanes :** Anti-SNAP25 antibody [EP3274] (ab108990) at 1/2000 dilution

**Lane 1 :** Mouse brain tissue lysate

**Lane 2 :** Mouse heart tissue lysate

**Lane 3 :** Mouse kidney tissue lysate

**Lane 4 :** Mouse spleen tissue lysate

**Lane 5 :** Rat brain tissue lysate

**Lane 6 :** Rat heart tissue lysate

**Lane 7 :** Rat kidney tissue lysate

**Lane 8 :** Rat spleen tissue lysate

Lysates/proteins at 20 µg per lane.

## Secondary

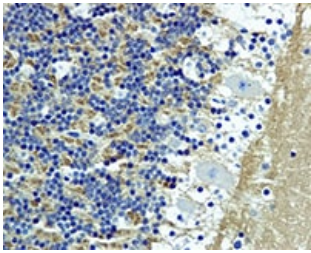
**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) (Goat Anti-

Rabbit IgG, (H+L), Peroxidase conjugated)

**Predicted band size:** 23 kDa

**Observed band size:** 25 kDa

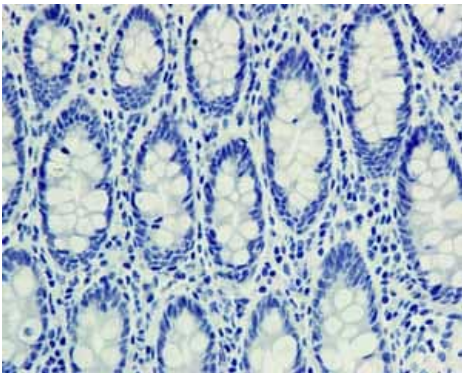
Blocking/Diluting buffer and concentration: 5% NFDM /TBST



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SNAP25 antibody [EP3274] (ab108990)

ab108990, at 1/100 dilution, staining SNAP25 in paraffin-embedded Human cerebellum tissue by Immunohistochemistry.

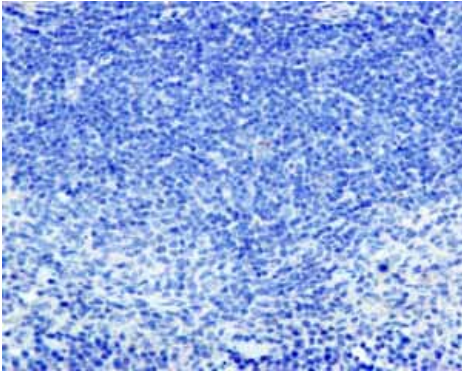
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SNAP25 antibody [EP3274] (ab108990)

ab108990 showing negative staining in human Normal colon tissue.

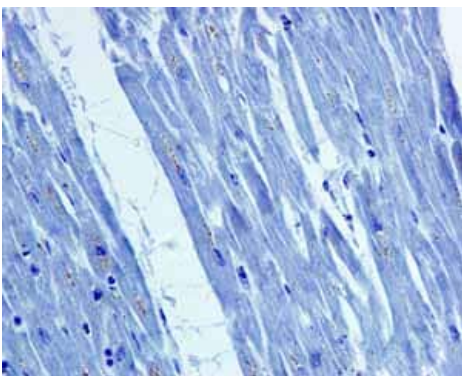
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SNAP25 antibody [EP3274] (ab108990)

ab108990 showing negative staining in human Normal spleen tissue.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SNAP25 antibody [EP3274] (ab108990)

ab108990 showing negative staining in human Skeletal muscle tissue.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

### 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-SNAP25 antibody [EP3274] (ab108990)

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

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