

## Product datasheet

### Anti-alpha Internexin antibody [EP676Y] ab40758

KO VALIDATED Recombinant RabMAb

★★★★☆ 7 Abreviews 8 References 6 Images

#### Overview

Product name	Anti-alpha Internexin antibody [EP676Y]
Description	Rabbit monoclonal [EP676Y] to alpha Internexin
Host species	Rabbit
Tested applications	<b>Suitable for:</b> WB, IP, IHC-FoFr, Flow Cyt, IHC-P, ICC/IF
Species reactivity	<b>Reacts with:</b> Mouse, Rat, Human <b>Does not react with:</b> Apterionotus leptorhynchus
Immunogen	Synthetic peptide within Human alpha Internexin aa 400-500. The exact sequence is proprietary.
Positive control	HeLa, SHSY5Y cell lysate, human brain lysate.
General notes	This product is a recombinant monoclonal antibody, which offers several advantages including: <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> For more information <a href="#">see here</a> . Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb® patents</a> .

#### Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture supernatant
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EP676Y
Isotype	IgG

## Applications

### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab40758 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	★★★★★ (2)	1/5000 - 1/10000. Detects a band of approximately 60 kDa (predicted molecular weight: 66 kDa).
IP		Use at an assay dependent concentration.
IHC-FoFr	★★★★★ (1)	Use at an assay dependent concentration.
Flow Cyt		Use at an assay dependent concentration. <b>ab172730</b> - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
IHC-P	★★★★★ (1)	1/250 - 1/500. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
ICC/IF	★★★★★ (1)	1/250 - 1/500.

## Target

### Function

Class-IV neuronal intermediate filament that is able to self-assemble. It is involved in the morphogenesis of neurons. It may form an independent structural network without the involvement of other neurofilaments or it may cooperate with NF-L to form the filamentous backbone to which NF-M and NF-H attach to form the cross-bridges.

### Tissue specificity

Found predominantly in adult CNS.

### Sequence similarities

Belongs to the intermediate filament family.

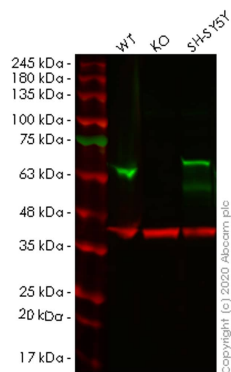
### Developmental stage

Expressed in brain as early as the 16th week of gestation, and increased rapidly and reached a steady state level by the 18th week of gestation.

### Post-translational modifications

O-glycosylated.  
Phosphorylated upon DNA damage, probably by ATM or ATR.

## Images



Western blot - Anti-alpha Internexin antibody  
[EP676Y] (ab40758)

**All lanes** : Anti-alpha Internexin antibody [EP676Y] (ab40758) at 1/1000 dilution

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

**Lane 2** : INA knockout HeLa cell lysate

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

Lysates/proteins at 20 µg per lane.

### Secondary

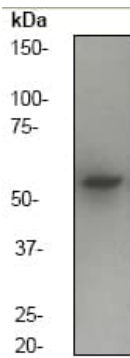
**All lanes** : Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed ([ab216773](#)) at 1/10000 dilution

**Predicted band size:** 66 kDa

**Observed band size:** 66 kDa

**Lanes 1-4:** Merged signal (red and green). Green - ab40758 observed at 66 kDa. Red - loading control [ab8245](#) observed at 36 kDa.

ab40758 Anti-alpha Internexin antibody [EP676Y] was shown to specifically react with alpha Internexin in wild-type HeLa cells. Loss of signal was observed when knockout cell line [ab265264](#) (knockout cell lysate [ab257482](#)) was used. Wild-type and alpha Internexin knockout samples were subjected to SDS-PAGE. ab40758 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.

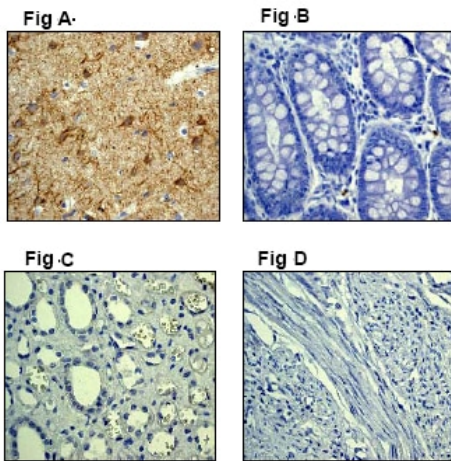


Western blot - Anti-alpha Internexin antibody  
[EP676Y] (ab40758)

Anti-alpha Internexin antibody [EP676Y] (ab40758) at 1/10000  
dilution + SHSY5Y cell lysate at 10 µg

**Predicted band size:** 66 kDa

**Observed band size:** 60 kDa

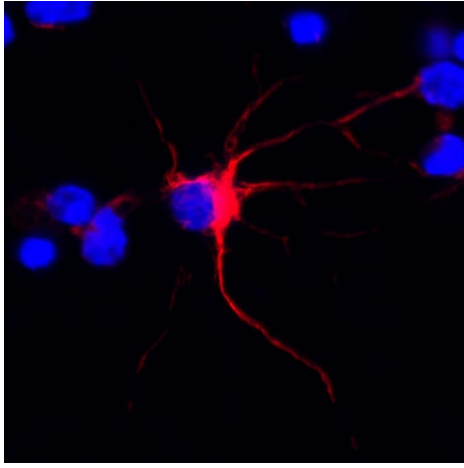


Immunohistochemistry (Formalin/PFA-fixed paraffin-  
embedded sections) - Anti-alpha Internexin antibody  
[EP676Y] (ab40758)

Positive staining of alpha Internexin on paraffin-embedded human  
brain tissue (A) using ab40758 diluted 1:250. Negative staining of  
paraffin-embedded human colon (B), Kidney (C) and uterus (D)  
tissues using ab40758 under the same conditions.

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

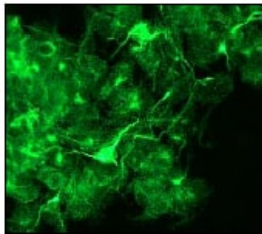
Perform heat mediated antigen retrieval with citrate buffer pH 6  
before commencing with IHC staining protocol.



Immunocytochemistry/ Immunofluorescence - Anti-alpha Internexin antibody [EP676Y] (ab40758)

This image is courtesy of an anonymous Abreview

ab40758 staining alpha Internexin in rat glial cells by ICC/IF (Immunocytochemistry/immunofluorescence). Cells were fixed with paraformaldehyde, permeabilized with saponin and blocked with 1% BSA for 10 minutes at 25°C. Samples were incubated with primary antibody (1/200) for 10 hours at 4°C. An undiluted Alexa Fluor® 594-conjugated donkey anti-rabbit IgG polyclonal was used as the secondary antibody.



Immunocytochemistry/ Immunofluorescence - Anti-alpha Internexin antibody [EP676Y] (ab40758)

Immunofluorescent staining of alpha Internexin on PC 12 cells using ab40758 diluted 1:250.

#### 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-alpha Internexin antibody [EP676Y] (ab40758)

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

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