

## Product datasheet

# Anti-Neurotrophin 4 antibody [2E8] ab87394

★★★★★ 1 Abreviews 1 References 15 Images

### Overview

---

|                            |  |
|----------------------------|--|
| <b>Product name</b>        | Anti-Neurotrophin 4 antibody [2E8]   |
| <b>Description</b>         | Mouse monoclonal [2E8] to Neurotrophin 4   |
| <b>Host species</b>        | Mouse  |
| <b>Tested applications</b> | <b>Suitable for:</b> ICC/IF, WB, IHC-P   |
| <b>Species reactivity</b>  | <b>Reacts with:</b> Human  |
| <b>Immunogen</b>           | Recombinant protein corresponding to amino acids 81-210 of human Neurotrophin 4 (NM_006179), expressed in <i>E.coli</i> .  |
| <b>Positive control</b>    | WB: transfected HEK293T cells, mature recombinant human Neurotrophin 4. IHC-P: human breast, adenocarcinoma of human breast, human colon, adenocarcinoma of human colon, human kidney, carcinoma of human kidney, human liver, carcinoma of human liver, human lung, carcinoma of human lung, carcinoma of human pancreas, human endometrium. This antibody gave a positive result when used in the following formaldehyde fixed cell lines: PC3 |

### 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>       | Preservative: 0.02% Sodium Azide<br>Constituents: 50% Glycerol, 1% BSA, PBS, pH 7.3   |
| <b>Purity</b>               | Protein G purified  |
| <b>Purification notes</b>   | Purified from mouse ascites fluids by affinity chromatography.                        |
| <b>Clonality</b>            | Monoclonal  |
| <b>Clone number</b>         | 2E8   |
| <b>Isotype</b>              | IgG1  |

### Applications

---

Our [Abpromise guarantee](#) covers the use of **ab87394** 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 |
|-------------|-----------|-------|
| ICC/IF      |           |       |
| WB          |           |       |
| IHC-P       | ★★★★★     |       |

**Application notes**

IHC-P: 1/50.  
 WB: 1/5000. Predicted molecular weight: 22 kDa.

Not yet tested in other applications.  
 Optimal dilutions/concentrations should be determined by the end user.

**Target**

**Function**

Target-derived survival factor for peripheral sensory sympathetic neurons.

**Tissue specificity**

Highest levels in prostate, lower levels in thymus, placenta, and skeletal muscle. Expressed in embryonic and adult tissues.

**Involvement in disease**

Defects in NTF4 may be associated with susceptibility to primary open angle glaucoma type 10 (GLC10) [MIM:613100]. A form of primary open angle glaucoma (POAG). POAG is characterized by a specific pattern of optic nerve and visual field defects. The angle of the anterior chamber of the eye is open, and usually the intraocular pressure is increased. The disease is asymptomatic until the late stages, by which time significant and irreversible optic nerve damage has already taken place.

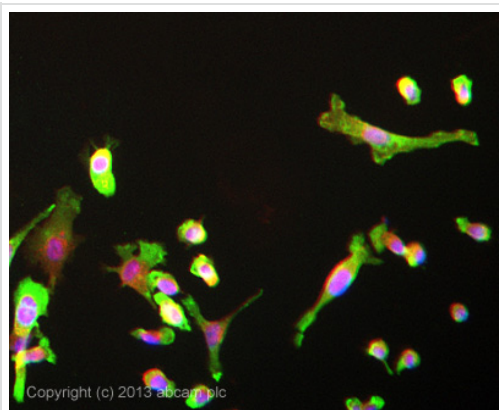
**Sequence similarities**

Belongs to the NGF-beta family.

**Cellular localization**

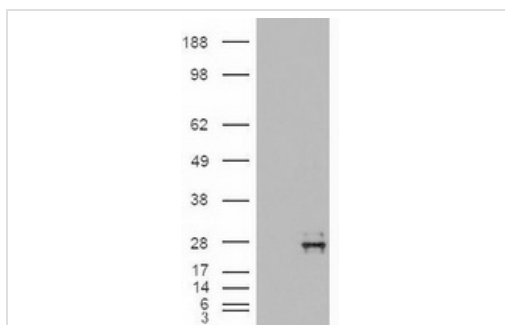
Secreted.

**Images**



Immunocytochemistry/ Immunofluorescence - Anti-Neurotrophin 4 antibody [2E8] (ab87394)

ab87394 stained PC3 cells. The cells were 4% formaldehyde fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody ab87394 at 1/200 dilution overnight at +4°C. The secondary antibody (green) was DyLight® 488 goat anti- mouse (ab96879) IgG (H+L) used at a 1/250 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.



Western blot - Anti-Neurotrophin 4 antibody [2E8] (ab87394)

**All lanes :** Anti-Neurotrophin 4 antibody [2E8] (ab87394) at 1/5000 dilution

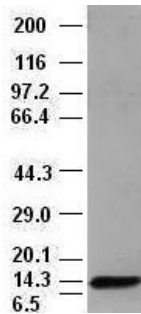
**Lane 1 :** HEK293T cells transfected with the pCMV6-ENTRY control cDNA for 48 hrs and lysed.

**Lane 2 :** HEK293T cells transfected with pCMV6-ENTRY Neurotrophin 4 cDNA for 48 hrs and lysed.

Lysates/proteins at 5 µg per lane.

**Predicted band size:** 22 kDa

HEK293T cell lysates were generated from transient transfection of the cDNA clone (RC200198)



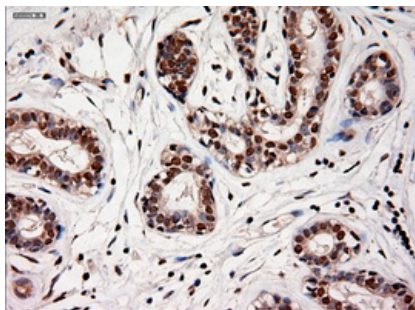
Western blot - Anti-Neurotrophin 4 antibody [2E8]  
(ab87394)

Anti-Neurotrophin 4 antibody [2E8] (ab87394)  
at 1/5000 dilution + mature recombinant  
human NT4 (14 kDa)

**Predicted band size:** 22 kDa

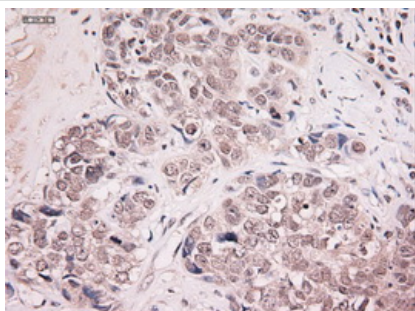
**Observed band size:** 14 kDa

HEK293T cell lysates were generated from  
transient transfection of the cDNA clone  
(RC200174)



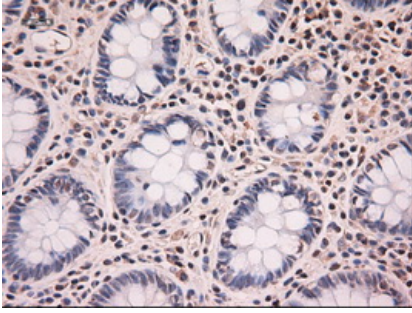
Immunohistochemistry (Formalin/PFA-fixed paraffin-  
embedded sections) - Anti-Neurotrophin 4 antibody  
[2E8] (ab87394)

Immunohistochemical analysis of paraffin  
embedded human breast tissue using  
ab87394 at a 1/50 dilution.



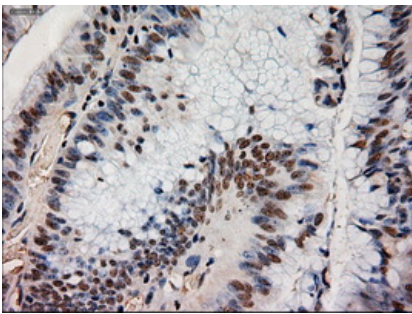
Immunohistochemistry (Formalin/PFA-fixed paraffin-  
embedded sections) - Anti-Neurotrophin 4 antibody  
[2E8] (ab87394)

Immunohistochemical analysis of paraffin  
embedded adenocarcinoma of human breast  
tissue, using ab87394 at a 1/50 dilution.



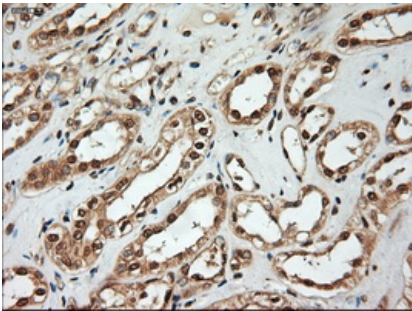
Immunohistochemical analysis of paraffin embedded human colon tissue, using ab87394 at a 1/50 dilution.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Neurotrophin 4 antibody [2E8] (ab87394)



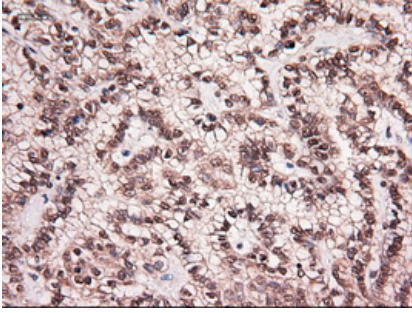
Immunohistochemical analysis of paraffin embedded adenocarcinoma of human colon tissue, using ab87394 at a 1/50 dilution.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Neurotrophin 4 antibody [2E8] (ab87394)



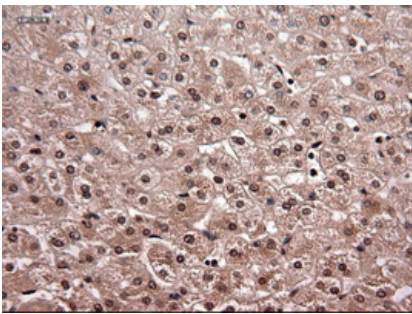
Immunohistochemical analysis of paraffin embedded human kidney tissue, using ab87394 at a 1/50 dilution.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Neurotrophin 4 antibody [2E8] (ab87394)



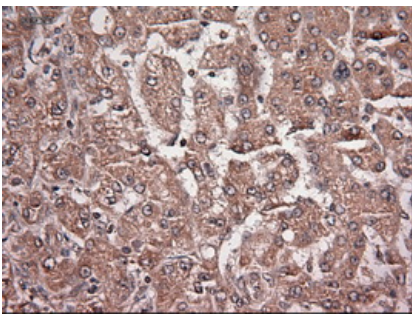
Immunohistochemical analysis of paraffin embedded carcinoma of human kidney tissue, using ab87394 at a 1/50 dilution.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Neurotrophin 4 antibody [2E8] (ab87394)



Immunohistochemical analysis of paraffin embedded human liver tissue, using ab87394 at a 1/50 dilution.

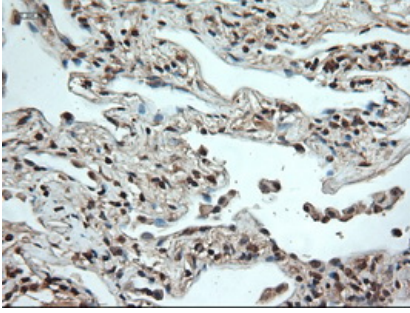
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Neurotrophin 4 antibody [2E8] (ab87394)



Immunohistochemical analysis of paraffin embedded carcinoma of human liver tissue, using ab87394 at a 1/50 dilution.

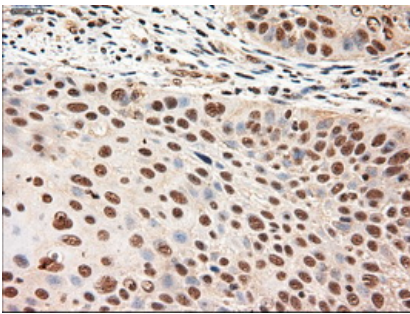
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Neurotrophin 4 antibody [2E8] (ab87394)





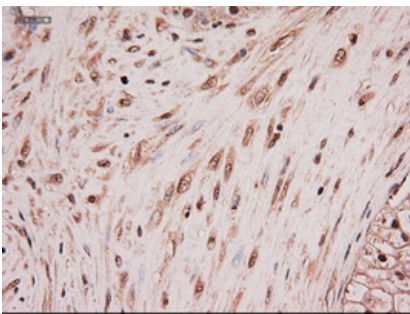
Immunohistochemical analysis of paraffin embedded human lung tissue, using ab87394 at a 1/50 dilution.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Neurotrophin 4 antibody [2E8] (ab87394)



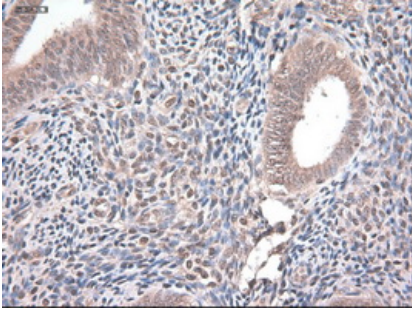
Immunohistochemical analysis of paraffin embedded carcinoma of human lung tissue, using ab87394 at a 1/50 dilution.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Neurotrophin 4 antibody [2E8] (ab87394)



Immunohistochemical analysis of paraffin embedded carcinoma of human pancreas, using ab87394 at a 1/50 dilution.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Neurotrophin 4 antibody [2E8] (ab87394)



Immunohistochemical analysis of paraffin embedded human endometrium tissue, using ab87394 at a 1/50 dilution.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Neurotrophin 4 antibody [2E8] (ab87394)

**Please note:** All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE"

### Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

### Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors