# Product datasheet

**Anti-Tenascin C antibody [EPR4219] ab108930**

<table>
<thead>
<tr>
<th>Overview</th>
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</thead>
<tbody>
<tr>
<td><strong>Product name</strong></td>
<td>Anti-Tenascin C antibody [EPR4219]</td>
</tr>
<tr>
<td><strong>Description</strong></td>
<td>Rabbit monoclonal [EPR4219] to Tenascin C</td>
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<tr>
<td><strong>Host species</strong></td>
<td>Rabbit</td>
</tr>
<tr>
<td><strong>Specificity</strong></td>
<td>IHC on human tissues which we tested (such as testis, pancreas and stomach) showed non-specific staining. We don’t recommend this antibody for IHC on human tissues.</td>
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</tbody>
</table>
| **Tested applications** | Suitable for: WB, IHC-P, IHC-Fr  
Unsuitable for: ICC or IP |
| **Species reactivity** | Reacts with: Mouse, Rat, Human |
| **Immunogen** | Synthetic peptide within Human Tenascin C aa 2150-2250. The exact sequence is proprietary.  
Database link: [P24821](https://www.ncbi.nlm.nih.gov/protein/P24821) |
| **Positive control** | IHC-Fr: Mouse E14 spinal cord and cerebellar cortex tissue; Rat cerebellar cortex tissue. IHC-P: Rat cerebellar cortex tissue; Mouse E14 spinal cord and cerebellar cortex tissue. WB: U87-MG cell lysate; Postnatal mouse cerebellum lysate; Postnatal rat brain lysate; Human fetal brain lysate. |
| **General notes** | This product is a recombinant monoclonal antibody, which offers several advantages including:  
- High batch-to-batch consistency and reproducibility  
- Improved sensitivity and specificity  
- Long-term security of supply  
- Animal-free production  
For more information see [here](https://www.abcam.com). |

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

We are constantly working hard to ensure we provide our customers with best in class antibodies. As a result of this work we are pleased to now offer this antibody in purified format. We are in the process of updating our datasheets. The purified format is designated 'PUR' on our product labels. If you have any questions regarding this update, please contact our Scientific Support team.

## Properties

| Form | Liquid |
Storage instructions
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.

Storage buffer
pH: 7.20
Preservative: 0.01% Sodium azide
 Constituents: 50% Glycerol, PBS, 0.05% BSA

Purity
Protein A purified

Clonality
Monoclonal

Clone number
EPR4219

Isotype
IgG

Applications

Our Abpromise guarantee covers the use of ab108930 in the following tested applications.

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

<table>
<thead>
<tr>
<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>IHC-P</td>
<td>⭐⭐⭐⭐⭐</td>
<td>Use at an assay dependent concentration. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. PubMed: 24384131 Antigen retrieval is recommended.</td>
</tr>
<tr>
<td>IHC-Fr</td>
<td>⭐⭐⭐⭐⭐</td>
<td>Use at an assay dependent concentration.</td>
</tr>
</tbody>
</table>

Application notes
Is unsuitable for ICC or IP.

Target

Function
Extracellular matrix protein implicated in guidance of migrating neurons as well as axons during development, synaptic plasticity as well as neuronal regeneration. Promotes neurite outgrowth from cortical neurons grown on a monolayer of astrocytes. Ligand for integrins alpha-8/beta-1, alpha-9/beta-1, alpha-V/beta-3 and alpha-V/beta-6.

Sequence similarities
Belongs to the tenascin family.
Contains 15 EGF-like domains.
Contains 1 fibrinogen C-terminal domain.
Contains 15 fibronectin type-III domains.

Cellular localization
Secreted > extracellular space > extracellular matrix.

Images
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of rat cerebellar cortex labeling Tenascin C with ab108930 at 1/500 dilution (0.854 μg/ml). Heat mediated antigen retrieval was performed using Tris/EDTA Buffer, pH 9 (ab93684). A ready to use Goat Anti-Rabbit IgG H&L (HRP) secondary antibody was used. Hematoxylin counterstain. Staining on the molecular layer of rat cerebellar cortex (PMID: 1372043) is observed.

Immunohistochemistry (Frozen sections) analysis of mouse E14 spinal cord labeling Tenascin C with ab108930 at 1/100 dilution (4.27μg/ml). Tissue was fixed with 4% PFA and permeabilized with 0.2% TritonX-100. Antigen retrieval was performed using a heated citrate solution (10mM citrate PH 6.0 + 0.05% Tween-20). ab150077, an AlexaFluor® 488 Goat anti-Rabbit secondary antibody was used at 1/1000 (2 μg/ml). DAPI nuclear counterstain.

Positive staining on mesenchymal condensations during chondrogenesis of mouse E14 embryo (PMID: 9822997; PMID: 19586317; PMID: 24778247) is observed.
**Western blot - Anti-Tenascin C antibody [EPR4219] (ab108930)**

**All lanes**: Anti-Tenascin C antibody [EPR4219] (ab108930) at 1/1000 dilution

**Lane 1**: Human fetal brain

**Lane 2**: Human liver

Lysates/proteins at 20 µg per lane.

**Secondary**

**All lanes**: Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

**Predicted band size**: 241 kDa

**Observed band size**: 250 kDa

*why is the actual band size different from the predicted?*

**Exposure time**: 3 minutes

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

Liver is negative control (PMID: 1717349). The molecular weight observed is consistent with what has been described in the literature (PMID: 10462531).
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of mouse E14 spinal cord tissue sections labeling Tenascin C with ab108930 at 1/500 dilution (0.854 μg/ml). Heat mediated antigen retrieval was performed using Tris/EDTA buffer, pH 9 (ab93684). A ready to use Goat Anti-Rabbit IgG H&L (HRP) secondary antibody was used. Hematoxylin counterstain.

Positive staining on mesenchymal condensations during chondrogenesis of mouse E14 embryo (PMID: 9822997; PMID: 19586317; PMID: 24778247) is observed.

Anti-Tenascin C antibody [EPR4219] (ab108930) at 1/1000 dilution + U87-MG (human glioblastoma) whole cell lysate at 10 µg

**Secondary**

Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

**Predicted band size:** 241 kDa

**Observed band size:** 250 kDa  why is the actual band size different from the predicted?

**Exposure time:** 3 minutes

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

The molecular weight observed is consistent with what has been described in the literature (PMID: 10462531).
Immunohistochemistry (Frozen sections) analysis of rat cerebellar cortex labeling Tenascin C with ab108930 at 1/100 dilution (4.27μg/ml). Tissue was fixed with 4% PFA and permeabilized with 0.2% TritonX-100. Antigen retrieval was performed using a heated citrate solution (10mM citrate pH 6.0 + 0.05% Tween-20).

ab150077, an AlexaFluor® 488 Goat anti-Rabbit secondary antibody was used at 1/1000 (2 μg/ml). DAPI nuclear counterstain.

Positive staining on the molecular layer of rat cerebellar cortex (PMID: 1372043) is observed.

Immunohistochemistry (Frozen sections) analysis of mouse E14 cerebellar cortex labeling Tenascin C with ab108930 at 1/100 dilution (4.27μg/ml). Tissue was fixed with 4% PFA and permeabilized with 0.2% TritonX-100. Antigen retrieval was performed using a heated citrate solution (10mM citrate pH 6.0 + 0.05% Tween-20). ab150077, an AlexaFluor® 488 Goat anti-Rabbit secondary antibody was used at 1/1000 (2 μg/ml). DAPI nuclear counterstain.

Positive staining on the molecular layer of mouse E14 cerebellar cortex (PMID: 1372043) is observed.

**All lanes**: Anti-Tenascin C antibody [EPR4219] (ab108930) at 1/1000 dilution

**Lane 1**: Postnatal (P0) mouse cerebellum

**Lane 2**: Postnatal (P0) rat brain

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**: 241 kDa

**Observed band size**: 250 kDa *why is the actual band size*
Different from the predicted?

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

Exposure Time:
Lane 1: 15 seconds
Lane 2: 30 seconds

The molecular weight observed is consistent with what has been described in the literature (PMID: 10462531).

Anti-Tenascin C antibody [EPR4219] (ab108930) at 1/1000 dilution
+ Human fetal brain lysate at 10 µg

**Predicted band size:** 241 kDa

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of mouse cerebellar cortex labeling Tenascin C with ab108930 at 1/500 dilution (0.854 µg/ml). Heat mediated antigen retrieval was performed using Tris/EDTA buffer, pH 9 (ab93684). Hematoxylin was used to counterstain. A ready to use Goat Anti-Rabbit IgG H&L (HRP) secondary antibody was used. Staining on the molecular layer of mouse cerebellar cortex (PMID: 1372043) is observed.

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

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