**Product datasheet**

**Anti-Myelin PLP antibody [plpc 1] ab9311**

4 Abreviews 10 References 2 Images

**Overview**

<table>
<thead>
<tr>
<th><strong>Product name</strong></th>
<th>Anti-Myelin PLP antibody [plpc 1]</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description</strong></td>
<td>Mouse monoclonal [plpc 1] to Myelin PLP</td>
</tr>
<tr>
<td><strong>Host species</strong></td>
<td>Mouse</td>
</tr>
<tr>
<td><strong>Specificity</strong></td>
<td>This antibody recognizes myelin proteolipid protein</td>
</tr>
<tr>
<td><strong>Tested applications</strong></td>
<td>Suitable for: IHC-FrFr, IHC-Fr, WB, ICC/IF, IHC (PFA fixed)</td>
</tr>
<tr>
<td><strong>Species reactivity</strong></td>
<td>Reacts with: Mouse, Rat, Cow</td>
</tr>
<tr>
<td><strong>Immunogen</strong></td>
<td>Synthetic peptide: C-GRGTKF, corresponding to amino acids 272-277 of Myelin PLP.</td>
</tr>
</tbody>
</table>

**Properties**

<table>
<thead>
<tr>
<th><strong>Form</strong></th>
<th>Liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Storage instructions</strong></td>
<td>Shipped at 4°C. Store at +4°C short term (1-2 weeks), Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.</td>
</tr>
<tr>
<td><strong>Storage buffer</strong></td>
<td>Preservative: 0.1% Sodium azide</td>
</tr>
<tr>
<td><strong>Purity</strong></td>
<td>Protein G purified</td>
</tr>
<tr>
<td><strong>Clonality</strong></td>
<td>Monoclonal</td>
</tr>
<tr>
<td><strong>Clone number</strong></td>
<td>plpc 1</td>
</tr>
<tr>
<td><strong>Myeloma</strong></td>
<td>Sp2/0</td>
</tr>
<tr>
<td><strong>Isotype</strong></td>
<td>IgG2a</td>
</tr>
<tr>
<td><strong>Light chain type</strong></td>
<td>unknown</td>
</tr>
</tbody>
</table>

**Applications**

Our Abpromise guarantee covers the use of **ab9311** in the following tested applications.

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

This is the major myelin protein from the central nervous system. It plays an important role in the formation or maintenance of the multilamellar structure of myelin.

**Involvement in disease**

Defects in PLP1 are the cause of leukodystrophy hypomyelinating type 1 (HLD1) [MIM:312080]; also known as Pelizaeus-Merzbacher disease. HLD1 is an X-linked recessive dysmyelinating disorder of the central nervous system in which myelin is not formed properly. It is characterized clinically by nystagmus, spastic quadriplegia, ataxia, and developmental delay.

Defects in PLP1 are the cause of spastic paraplegia X-linked type 2 (SPG2) [MIM:312920]. SPG2 is characterized by spastic gait and hyperreflexia. In some patients, complicating features include nystagmus, dysarthria, sensory disturbance, mental retardation, optic atrophy.

**Sequence similarities**

Belongs to the myelin proteolipid protein family.

**Cellular localization**

Membrane.

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**Target**

**Application** | **Abreviews** | **Notes**
---|---|---
IHC-FoFr | Use at an assay dependent concentration. PubMed: 17626200
IHC-Fr | ★★★★★ | Use at an assay dependent concentration.
WB | ★★★★☆ | Use at an assay dependent concentration.
ICC/IF | ★★★★☆ | 1/100.
IHC (PFA fixed) | | 1/1000.

**Images**

ab9311 at a dilution of 1/1000, staining neuronal Myelin PLP (Alexa 488 secondary at 1/2000) in rat brain tissue (30µm thick coronal sections) on free floating IHC (see protocol link for detailed description). Image taken with a 40x objective. No labeling observed following omission of primary antibody.

Sections were viewed using an Axioplan 2 Imaging microscope (Imaging Associates) fitted with 10x, 20x and 40x Plan-Neofluorobjectives (Zeiss, Germany) and images were taken using a AxioCam Hrm digital camera (Zeiss, Germany) and AxioVision software (Imaging Associates).
Immunohistochemistry (Frozen sections) - Anti-Myelin PLP antibody [plpc 1] (ab9311)

This image is courtesy of an Abreview submitted by Mr Travis Lyttle

ab9311 at 1/100 staining rat spinal cord tissue sections by IHC-Fr. The tissue sections were paraformaldehyde fixed and incubated with the antibody for 24 hours. A Texas Red conjugated goat anti-mouse antibody was used as the secondary.

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