Product name: Anti-IgG4 antibody [EP4420] ab109493

Description: Rabbit monoclonal [EP4420] to IgG4

Host species: Rabbit

Specificity: Does not cross-react with IgG1, IgG2, or IgG3.

Tested applications: Suitable for: WB, IHC-P
Unsuitable for: ICC or IP

Species reactivity: Reacts with: Human, Recombinant fragment

Immunogen: Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

Positive control: WB: Human IgG4 recombinant protein; Human plasma; Human spleen tissue lysate. IHC-P: Human tonsil tissue.

General notes: Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.

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

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: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture
Purity: Tissue culture supernatant
Clonality: Monoclonal
Clone number: EP4420
Isotype: IgG

Applications

**The Abpromise guarantee**  
Our Abpromise guarantee covers the use of ab109493 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>WB</td>
<td></td>
<td>1/1000 - 1/10000. Predicted molecular weight: 36 kDa.</td>
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<tr>
<td>IHC-P</td>
<td></td>
<td>1/1000 - 1/5000. Perform heat mediated antigen retrieval via the pressure cooker method before commencing with IHC staining protocol.</td>
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</tbody>
</table>

**Application notes**  
Is unsuitable for ICC or IP.

**Target**

**Relevance**  
IgG4 antibodies will dominate the IgG response in schistosomiasis, lymphatic filariasis, and in patients after allergen immunotherapy. Unlike the other IgG subclasses, IgG4 does not activate complement. A combined IgA-IgG4 deficiency has been associated with recurrent pyogenic infections.

**Cellular localization**  
Secreted

**Images**

**Western blot - Anti-IgG4 antibody [EP4420] (ab109493)**

- **All lanes**: Anti-IgG4 antibody [EP4420] (ab109493) at 1/1000 dilution

- **Lane 1**: IgG4 Recombinant protein at 0.005 µg
- **Lane 2**: IgG1 Recombinant protein at 0.01 µg
- **Lane 3**: IgG2 Recombinant protein at 0.01 µg
- **Lane 4**: IgG3 Recombinant protein at 0.01 µg

**Secondary**

- **All lanes**: Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

**Predicted band size**: 36 kDa
**Observed band size**: 52 kDa
Blocking and dilution buffer: 5% NFDM/TBST.
Exposure time: 180 seconds.

ab109493 at 1/1000 dilution staining IgG4 in Paraffin embedded Human tonsil tissue.
Perform heat mediated antigen retrieval via the pressure cooker method before commencing with IHC staining protocol.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-IgG4 antibody [EP4420] (ab109493)

Western blot - Anti-IgG4 antibody [EP4420] (ab109493) at 1/1000 dilution

Lane 1: IgG4 Recombinant protein at 0.005 µg
Lane 2: IgG1 Recombinant protein at 0.01 µg
Lane 3: IgG2 Recombinant protein at 0.01 µg
Lane 4: IgG3 Recombinant protein at 0.01 µg
Lane 5: Human spleen lysate at 10 µg
Lane 6: Human plasma lysate at 10 µg

Predicted band size: 36 kDa
Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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

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- 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](https://www.abcam.com/abpromise) or contact our technical team.

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