Overview

Product name: Anti-TLR7 antibody [EPR2088(2)]
Description: Rabbit monoclonal [EPR2088(2)] to TLR7
Host species: Rabbit
Tested applications: Suitable for: WB, IHC-P
Unsuitable for: Flow Cyt or ICC/IF
Species reactivity: Reacts with: Human
Immunogen: Synthetic peptide within Human TLR7 aa 1000 to the C-terminus (C terminal). The exact sequence is proprietary.
Database link: Q9NYK1
Positive control: WB: Raji, Daudi and Ramos cell lysates. 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.

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.

This product is a recombinant rabbit monoclonal antibody.

Properties

Form: Liquid
Dissociation constant (K_D): K_D = 2.90 x 10 ^{-11} M
Learn more about K

Storage buffer
pH: 7.40
Preservative: 0.01% Sodium azide
Constituents: 40% Glycerol, 0.05% BSA, 59% PBS

Purity
Protein A purified

Clonality
Monoclonal

Clone number
EPR2088(2)

Isotype
IgG

Applications
Our Abpromise guarantee covers the use of ab124928 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><img src="https://example.com/rating.png" alt="Rating" /></td>
<td>1/1000. Detects a band of approximately 140 kDa (predicted molecular weight: 121 kDa). For unpurified use at 1/300.</td>
</tr>
<tr>
<td>IHC-P</td>
<td><img src="https://example.com/rating.png" alt="Rating" /></td>
<td>1/100. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. See IHC antigen retrieval protocols. For unpurified use at 1/30.</td>
</tr>
</tbody>
</table>

Application notes
Is unsuitable for Flow Cyt or ICC/IF.

Target

Function
Key component of innate and adaptive immunity. TLRs (Toll-like receptors) control host immune response against pathogens through recognition of molecular patterns specific of microorganisms. TLR7 is a nucleotide-sensing TLR which is activated by single-stranded RNA. Acts via MYD88 and TRAF6, leading to NF-kappa-B activation, cytokine secretion and the inflammatory response.

Tissue specificity
Detected in brain, placenta, spleen, stomach, small intestine, lung and in plasmacytoid pre-dendritic cells.

Sequence similarities
Belongs to the Toll-like receptor family. Contains 27 LRR (leucine-rich) repeats. Contains 1 TIR domain.

Cellular localization

Images
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human tonsil tissue labelling TLR7 with unpurified ab124928 at 1/100.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human tonsil tissue labelling TLR7 with purified ab124928 at 1/100. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9. A prediluted HRP-polymer conjugated anti-rabbit IgG was used as the secondary antibody. Counterstained with hematoxylin.

All lanes: Anti-TLR7 antibody [EPR2088(2)] (ab124928) at 20 µg (unpurified)

Lane 1: Ramos cell lysate
Lane 2: Daudi cell lysate

Lysates/proteins at 20 µg per lane.

Secondary
All lanes: Peroxidase-conjugated goat anti-rabbit IgG at 1/1000 dilution

Predicted band size: 121 kDa
Observed band size: 140 kDa

why is the actual band size different from the predicted?
Blocking buffer and concentration: 5% NFDM/TBST.
Diluting buffer and concentration: 5% NFDM /TBST.

**All lanes**: Anti-TLR7 antibody [EPR2088(2)] (ab124928) (purified)

**Lane 1**: Ramos cell lysate  
**Lane 2**: Daudi cell lysate

Lysates/proteins at 20 µg per lane.

**Secondary**

**All lanes**: Peroxidase-conjugated goat anti-rabbit IgG (H+L) at 1/1000 dilution

**Predicted band size**: 121 kDa  
**Observed band size**: 140 kDa

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

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

**All lanes**: Anti-TLR7 antibody [EPR2088(2)] (ab124928) at 1/1000 dilution (unpurified)

**Lane 1**: Raji cell lysates  
**Lane 2**: Ramos cell lysates

Lysates/proteins at 10 µg per lane.

**Secondary**

**All lanes**: HRP-conjugated goat anti-rabbit at 1/2000 dilution

**Predicted band size**: 121 kDa
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human tonsil tissue labelling TLR7 with unpurified ab124928 at 1/100. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9. A prediluted HRP-polymer conjugated anti-rabbit IgG was used as the secondary antibody. Counterstained with hematoxylin.

Equilibrium disassociation constant (K_D)

Learn more about K_D

Click here to learn more about K_D

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

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