### Overview

<table>
<thead>
<tr>
<th><strong>Product name</strong></th>
<th>Anti-CD32B antibody [EP888Y]</th>
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</thead>
<tbody>
<tr>
<td><strong>Description</strong></td>
<td>Rabbit monoclonal [EP888Y] to CD32B</td>
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<tr>
<td><strong>Host species</strong></td>
<td>Rabbit</td>
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<td><strong>Specificity</strong></td>
<td>This antibody has weak cross-reactivity with CD32A and CD32C. It detects weak signal in CD32A and CD32C over-expressed lysates at the dilution of 1/200 under the exposure time of 3 minutes, but detects strong band in CD32B over-expressed lysates at the dilution of 1:2000 under the exposure time of 15 seconds.</td>
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| **Tested applications** | Suitable for: WB, IHC-P  
Unsuitable for: Flow Cyt, ICC/IF or IP |
| **Species reactivity** | Reacts with: Human |
| **Immunogen**    | Synthetic peptide corresponding to Human CD32B aa 250-350 (C terminal). |
| **Positive control** | Daudi cell lysate, human lymph node 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.  
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 buffer: pH: 7.20
Preservative: 0.01% Sodium azide
 Constituents: 59% PBS, 40% Glycerol, 0.05% BSA

Purity: Protein A purified

Clonality: Monoclonal

Clone number: EP888Y

Isotype: IgG

Applications

Our Abpromise guarantee covers the use of ab45143 in the following tested applications.

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

<table>
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<tr>
<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
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<td>WB</td>
<td>1/10000 - 1/50000. Detects a band of approximately 49-55 kDa.</td>
<td></td>
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<tr>
<td>IHC-P</td>
<td>1/1000. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. See IHC antigen retrieval protocols.</td>
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Application notes: Is unsuitable for Flow Cyt, ICC/IF or IP.

Target

Function: Receptor for the Fc region of complexed or aggregated immunoglobulins gamma. Low affinity receptor. Involved in a variety of effector and regulatory functions such as phagocytosis of immune complexes and modulation of antibody production by B-cells. Binding to this receptor results in down-modulation of previous state of cell activation triggered via antigen receptors on B-cells (BCR), T-cells (TCR) or via another Fc receptor. Isoform IIB1 fails to mediate endocytosis or phagocytosis. Isoform IIB2 does not trigger phagocytosis.

Tissue specificity: Is the most broadly distributed Fc-gamma-receptor. Expressed in monocyte, neutrophils, macrophages, basophils, eosinophils, Langerhans cells, B-cells, platelets cells and placenta (endothelial cells). Not detected in natural killer cells.

Involvement in disease: Note=A chromosomal aberration involving FCGR2B is found in a follicular lymphoma. Translocation t(1;22)(q22;q11). The translocation leads to the hyperexpression of the receptor. This may play a role in the tumor progression.

Sequence similarities: Contains 2 Ig-like C2-type (immunoglobulin-like) domains.

Domain: Contains 1 copy of a cytoplasmic motif that is referred to as the immunoreceptor tyrosine-based inhibitor motif (ITIM). This motif is involved in modulation of cellular responses. The phosphorylated ITIM motif can bind the SH2 domain of several SH2-containing phosphatases.

Cellular localization: Cell membrane.
Unpurified ab45143 staining human CD32 (1/100) in human lymph node by immunohistochemistry using paraffin embedded tissue. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

All lanes: Anti-CD32B antibody [EP888Y] (ab45143) at 1/10000 dilution (purified)

Lane 1: Human thyroid lysate
Lane 2: Daudi whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary
All lanes: Anti-rabbit IgG (HRP), specific to the non-reduced form of IgG at 1/1000 dilution

Observed band size: 40-44 kDa

why is the actual band size different from the predicted?

Blocking buffer: 5% NFDM/TBST
Dilution buffer: 5% NFDM/TBST
Immunohistochemical staining of paraffin embedded human spleen with purified ab45143 at a working dilution of 1/1000. The secondary antibody used is ab97051, a goat anti-rabbit IgG (H&L) at a dilution of 1/500. The sample is counter-stained with hematoxylin. Antigen retrieval was performed using Tris-EDTA buffer, pH 9.0. PBS was used instead of the primary antibody as the negative control, and is shown in the inset.

Lanes 1-2 & 5-6: Anti-CD32B antibody [EP888Y] (ab45143) at 1/200 dilution (unpurified)
Lanes 3-4: Anti-CD32B antibody [EP888Y] (ab45143) at 1/2000 dilution (unpurified)
Lane 1: Human CD32A overexpressed lysate
Lane 2 & 4 & 6: Non-transfected lysate
Lane 3: Human CD32B overexpressed lysate
Lane 5: Human CD32C overexpressed lysate

Lysates/proteins at 10 µg per lane.

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

Observed band size: 39 kDa why is the actual band size different from the predicted?

Exposure times: Lanes 1 and 2: 3 minutes, Lanes 3 and 4: 15 seconds, Lanes 5 and 6: 3 minutes.

Blocking and dilution buffer: 5% NFDM/TBST.
Anti-CD32B antibody [EP888Y] (ab45143) at 1/50000 dilution (unpurified) + Daudi cell lysate at 10 µg

Secondary
HRP-conjugated goat anti-rabbit IgG at 1/2000 dilution

Observed band size: 49-55 kDa  why is the actual band size different from the predicted?

Western blot - Anti-CD32B antibody [EP888Y] (ab45143)

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

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