**Product datasheet**

**Anti-GITR antibody [EPR20566] ab223841**

5 Images

**Overview**

<table>
<thead>
<tr>
<th>Product name</th>
<th>Anti-GITR antibody [EPR20566]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description</td>
<td>Rabbit monoclonal [EPR20566] to GITR</td>
</tr>
<tr>
<td>Host species</td>
<td>Rabbit</td>
</tr>
<tr>
<td>Specificity</td>
<td>We found ab223841 worked well in WB with recombinant protein only. The glycosylation of the endogenous target resulted in different molecular masses on the blot.</td>
</tr>
<tr>
<td>Tested applications</td>
<td>Suitable for: WB, IHC-P, ICC/IF</td>
</tr>
<tr>
<td>Species reactivity</td>
<td>Reacts with: Human</td>
</tr>
<tr>
<td>Immunogen</td>
<td>Synthetic peptide within Human GITR aa 50-150. The exact sequence is proprietary. Database link: Q9Y5U5</td>
</tr>
<tr>
<td>Positive control</td>
<td>WB: HEK-293T transfected with human GITR, containing a Myc-GFP-tag, whole cell lysate. IHC-P: Human tonsil, colon and Hodgkin's lymphoma tissues. ICC/IF: HEK-293T cells transfected with GFP-tagged GITR expression vector.</td>
</tr>
<tr>
<td>General notes</td>
<td>This product was previously labelled as TNFRSF18</td>
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</table>

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**

<table>
<thead>
<tr>
<th>Form</th>
<th>Liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Storage instructions</td>
<td>Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle.</td>
</tr>
<tr>
<td>Storage buffer</td>
<td>Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol, 0.05% BSA</td>
</tr>
</tbody>
</table>
**Purity**
Protein A purified

**Clonality**
Monoclonal

**Clone number**
EPR20566

**Isotype**
IgG

**Applications**

Our [Abpromise guarantee](#) covers the use of **ab223841** 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>1/1000. Predicted molecular weight: 26 kDa.</td>
<td></td>
</tr>
<tr>
<td>IHC-P</td>
<td>1/1000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.</td>
<td></td>
</tr>
<tr>
<td>ICC/IF</td>
<td>1/500.</td>
<td></td>
</tr>
</tbody>
</table>

**Target**

**Function**
Receptor for TNFSF18. Seems to be involved in interactions between activated T-lymphocytes and endothelial cells and in the regulation of T-cell receptor-mediated cell death. Mediated NF-kappa-B activation via the TRAF2/NIK pathway.

**Tissue specificity**
Expressed in lymph node, peripheral blood leukocytes and weakly in spleen.

**Sequence similarities**
Contains 3 TNFR-Cys repeats.

**Cellular localization**
Secreted and Cell membrane.

**Images**
Immunohistochemical analysis of paraffin-embedded human Hodgkin's lymphoma tissue labeling GITR with ab223841 at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Cytoplasmic staining in sporadic cells (arrows) in human Hodgkin's lymphoma (PMID: 25787078; PMID: 23785514). Counter stained with hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Immunofluorescent analysis of 4% paraformaldehyde-fixed 0.1% Triton X-100 permeabilized HEK-293T (human epithelial cell line from embryonic kidney transformed with large T antigen) cells, transfected with GFP only or with GFP-tagged GITR expression vector, labeling GITR with ab223841 at 1/500 dilution followed by by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 647) (ab150079) secondary antibody (white) at 1/500 dilution. Confocal image showing cytoplasmic staining in HEK-293T cells transfected with GFP-tagged GITR expression vector.

The nuclear counter stain is DAPI (blue). Tubulin is detected with Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) (ab195889) (red) at 1/200 dilution.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (Alexa Fluor® 647) (ab150079) secondary antibody at 1/500 dilution.
All lanes: Anti-GITR antibody [EPR20566] (ab223841) at 1/1000 dilution

**Lane 1**: HEK-293T (human epithelial cell line from embryonic kidney transformed with large T antigen) transfected with an empty vector (vector control) containing a Myc-GFP-tag whole cell lysate

**Lane 2**: HEK-293T (human epithelial cell line from embryonic kidney transformed with large T antigen) transfected with human GITR, containing a Myc-GFP-tag, whole cell lysate

Lysates/proteins at 10 µg per lane.

**Secondary**

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

Developed using the ECL technique.

**Predicted band size**: 26 kDa

**Observed band size**: 52 kDa

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

**Exposure time**: 1 second

Blocking/Dilution buffer: 5% NFDM/TBST.

Immunohistochemical analysis of paraffin-embedded human colon tissue labeling GITR with ab223841 at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Cytoplasmic staining in stromal cells (arrows) in human colon (PMID: 25787078; PMID: 23785514). Counter stained with hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
Immunohistochemical analysis of paraffin-embedded human tonsil tissue labeling GITR using ab223841 at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Cytoplasmic staining in sporadic cells (arrows) in human tonsil (PMID: 25787078; PMID: 23785514). Counter stained with hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

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

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