Product datasheet

Anti-TSG101 antibody [EPR7130(B)] ab125011

Overview

Product name
Anti-TSG101 antibody [EPR7130(B)]

Description
Rabbit monoclonal [EPR7130(B)] to TSG101

Host species
Rabbit

Tested applications
Suitable for: WB, Flow Cyt, ICC/IF, IHC-P
Unsuitable for: IP

Species reactivity
Reacts with: Mouse, Rat, Human

Immunogen
Synthetic peptide within Human TSG101 aa 1-100. The exact sequence is proprietary.

Positive control

General notes
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 instructions
Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle.

Dissociation constant ($K_D$)
$K_D = 4.00 \times 10^{-12} \text{ M}$
Learn more about K

Storage buffer
pH: 7.20
Preservative: 0.01% Sodium azide
Constituents: 40% Glycerol, 0.05% BSA, 59% PBS

Purity
Protein A purified

Clonality
Monoclonal

Clone number
EPR7130(B)

Isotype
IgG

Applications

Our Abpromise guarantee covers the use of ab125011 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>Abviews</th>
<th>Notes</th>
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</thead>
<tbody>
<tr>
<td>WB</td>
<td>1/1000 - 1/10000. Detects a band of approximately 45 kDa (predicted molecular weight: 44 kDa).</td>
<td></td>
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<tr>
<td>Flow Cyt</td>
<td>1/40. For unpurified use at 1/3. ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.</td>
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<tr>
<td>ICC/IF</td>
<td>1/100. For unpurified use at 1/10.</td>
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<tr>
<td>IHC-P</td>
<td>1/500. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. See IHC antigen retrieval protocols. For unpurified use at 1/30.</td>
<td></td>
</tr>
</tbody>
</table>

Application notes
Is unsuitable for IP.

Target

Function
Component of the ESCRT-I complex, a regulator of vesicular trafficking process. Binds to ubiquitinated cargo proteins and is required for the sorting of endocytic ubiquitinated cargos into multivesicular bodies (MVBs). Mediates the association between the ESCRT-0 and ESCRT-I complex. Required for completion of cytokinesis; the function requires CEP55. May be involved in cell growth and differentiation. Acts as a negative growth regulator. Involved in the budding of many viruses through an interaction with viral proteins that contain a late-budding motif P-[ST]-A-P. This interaction is essential for viral particle budding of numerous retroviruses.

Tissue specificity
Heart, brain, placenta, lung, liver, skeletal, kidney and pancreas.

Sequence similarities
Belongs to the ubiquitin-conjugating enzyme family. UEV subfamily.
Contains 1 SB (steadiness box) domain.
Contains 1 UEV (ubiquitin E2 variant) domain.

**Domain**
The UEV domain is required for the interaction of the complex with ubiquitin. It also mediates the interaction with PTAP/PSAP motifs of HIV-1 P6 protein and human spumaretrovirus Gag protein. The coiled coil domain may interact with stathmin. The UEV domain binds ubiquitin and P-[ST]-A-P peptide motif independently.

**Post-translational modifications**
Monoubiquitinated at multiple sites by LRSAM1 and by MGRN1. Ubiquitination inactivates it, possibly by regulating its shutting between an active membrane-bound protein and an inactive soluble form. Ubiquitination by MGRN1 requires the presence of UBE2D1.

**Cellular localization**

**Images**

![Western blot - Anti-TSG101 antibody [EPR7130(B)] (ab125011)](image.jpg)

**All lanes**: Anti-TSG101 antibody [EPR7130(B)] (ab125011) at 1/1000 dilution (unpurified)

**Lane 1**: Human brain lysate
**Lane 2**: K562 (human chronic myelogenous leukemia cell line from bone marrow) lysate
**Lane 3**: Jurkat (human T cell leukemia cell line from peripheral blood) cell lysate
**Lane 4**: SH-SY5Y (human neuroblastoma cell line from bone marrow) cell lysate

Lysates/proteins at 10 µg per lane.

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

**Predicted band size**: 44 kDa
**Observed band size**: 45 kDa

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

![Immunocytochemistry/ Immunofluorescence - Anti-TSG101 antibody [EPR7130(B)] (ab125011)](image.png)

Immunocytochemistry/Immunofluorescence analysis of HEK-293 (human epithelial cell line from embryonic kidney) cells labeling TSG101 (red) with unpurified ab125011 at 1/10. Cells were fixed with 4% paraformaldehyde. An Alexa Fluor® 555-conjugated goat anti-rabbit IgG (1/200) was used as the secondary antibody. Counterstained with DAPI (blue).
Immunohistochemical analysis of paraffin-embedded human kidney tissue labeling TSG101 with unpurified ab125011 at 1/30. 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.

Flow cytometric analysis of permeabilized K562 (human chronic myelogenous leukemia cell line from bone marrow) cells labeling TSG101 (red) with unpurified ab125011 at 1/10. Green - Isotype control, rabbit monoclonal IgG.

Equilibrium disassociation constant (K_D)
Learn more about K_D

Click here to learn more about K_D
**Western blot - Anti-TSG101 antibody [EPR7130(B)] (ab125011)**

**All lanes** : Anti-TSG101 antibody [EPR7130(B)] (ab125011) at 1/1000 dilution (unpurified)

**Lane 1** : Jurkat (human T cell leukemia cell line from peripheral blood) cell lysate

**Lane 2** : SH-SY5Y (human neuroblastoma cell line from bone marrow) cell lysate

Lysates/proteins at 10 µg per lane.

**Secondary**

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

**Predicted band size** : 44 kDa

**Observed band size** : 45 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.
**Western blot - Anti-TSG101 antibody [EPR7130(B)] (ab125011)**

**All lanes**: Anti-TSG101 antibody [EPR7130(B)] (ab125011) at 1/10000 dilution (purified)

**Lane 1**: Jurkat cell lysate

**Lane 2**: SH-SY5Y cell lysate

Lysates/proteins at 10 µg per lane.

**Secondary**

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

**Predicted band size**: 44 kDa

**Observed band size**: 45 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.

**Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TSG101 antibody [EPR7130(B)] (ab125011)**

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human kidney tissue labelling TSG101 with purified ab125011 at 1/500. 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.
**Western blot - Anti-TSG101 antibody [EPR7130(B)] (ab125011)**

All lanes: Anti-TSG101 antibody [EPR7130(B)] (ab125011) at 1/500 dilution (unpurified)

Lane 1: Mouse heart tissue lysate
Lane 2: Rat heart tissue lysate

Lysates/proteins at 10 µg per lane.

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

Predicted band size: 44 kDa
Observed band size: 45 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.

**Immunocytochemistry/Immunofluorescence - Anti-TSG101 antibody [EPR7130(B)] (ab125011)**

Immunocytochemistry/Immunofluorescence analysis of HEK-293 (human epithelial cell line from embryonic kidney) cells labeling TSG101 (red) with purified ab125011 at 1/100. Cells were fixed with 4% paraformaldehyde. An Alexa Fluor® 555-conjugated goat anti-rabbit IgG (1/200) was used as the secondary antibody. Counterstained with DAPI (blue).
Flow cytometry analysis of permeabilized HeLa (human epithelial cell line from cervix adenocarcinoma) cells labeling TSG101 with unpurified ab125011 at 1/3 (red). Cells were fixed with 2% paraformaldehyde. A FITC-conjugated goat anti-rabbit IgG (1/150) was used as the secondary antibody. Green - Isotype control, rabbit monoclonal IgG.

**All lanes**: Anti-TSG101 antibody [EPR7130(B)] (ab125011) (purified)

**All lanes**: Mouse heart tissue lysate

Lysates/proteins at 10 µg per lane.

**Secondary**

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

**Predicted band size**: 44 kDa

**Observed band size**: 45 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.
Flow cytometry analysis of permeabilized HeLa (human epithelial cell line from cervix adenocarcinoma) cells labeling TSG101 with purified ab125011 at 1/40 (red). Cells were fixed with 2% paraformaldehyde. A FITC-conjugated goat anti-rabbit IgG (1/150) was used as the secondary antibody. Green - Isotype control, rabbit monoclonal IgG.

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

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