

## Product datasheet

# Anti-TROP2 antibody [EPR20043] - Low endotoxin, Azide free ab222935

Recombinant RabMAb

7 Images

### Overview

<b>Product name</b>	Anti-TROP2 antibody [EPR20043] - Low endotoxin, Azide free
<b>Description</b>	Rabbit monoclonal [EPR20043] to TROP2 - Low endotoxin, Azide free
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB, IHC-P, Flow Cyt, ICC/IF
<b>Species reactivity</b>	<b>Reacts with:</b> Human
<b>Immunogen</b>	Synthetic peptide aa 300 to the C-terminus. The exact sequence is proprietary. Database link: <a href="#">P09758</a>
<b>Positive control</b>	WB: HCT 116, PC-3 and MCF7 whole cell lysates; human breast cancer, skin, placenta and prostate cancer lysates. IHC-P: Human skin, breast and cervix cancer tissues; mouse and rat skin tissues. ICC/IF: MCF7 and HCT 116 cells. Flow Cyt: MCF7 cells.
<b>General notes</b>	<p>ab222935 is a carrier-free antibody designed for use in antibody labeling, including fluorochromes, metal isotopes, oligonucleotides, enzymes.</p> <p>Our <a href="#">Low endotoxin, azide-free formats</a> have low endotoxin level (<math>\leq 1</math> EU/ml, determined by the LAL assay) and are free from azide, to achieve consistent experimental results in functional assays.</p> <p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a>.</p>

### Properties

**Form** Liquid

<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	Constituent: PBS
<b>Carrier free</b>	Yes
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR20043
<b>Isotype</b>	IgG

## Applications

Our [Abpromise guarantee](#) covers the use of **ab222935** in the following tested applications.

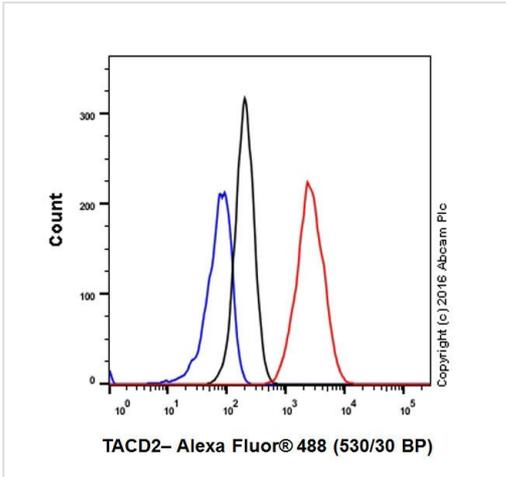
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use at an assay dependent concentration. Detects a band of approximately 37-50 kDa (predicted molecular weight: 36 kDa).
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. <a href="#">ab214488</a> is recommended for mouse and rat in IHC
Flow Cyt		Use at an assay dependent concentration. <a href="#">ab199376</a> - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
ICC/IF		Use at an assay dependent concentration.

## Target

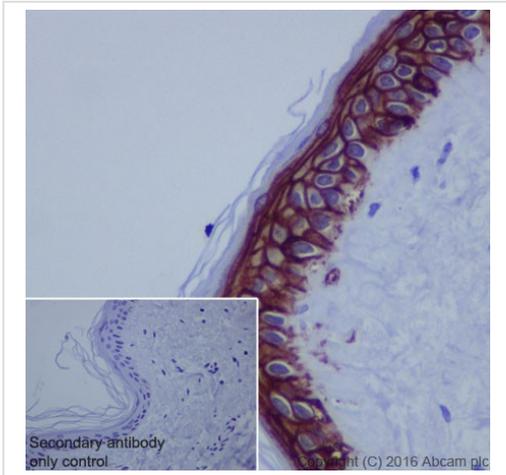
<b>Function</b>	May function as a growth factor receptor.
<b>Tissue specificity</b>	Placenta, pancreatic carcinoma cell lines.
<b>Involvement in disease</b>	Defects in TACSTD2 are the cause of gelatinous drop-like corneal dystrophy (GDLD) [MIM:204870]; also known as lattice corneal dystrophy type III. GDLD is an autosomal recessive disorder characterized by grayish corneal amyloid deposits that cause severe visual impairment.
<b>Sequence similarities</b>	Belongs to the EPCAM family. Contains 1 thyroglobulin type-1 domain.
<b>Post-translational modifications</b>	The N-terminus is blocked.
<b>Cellular localization</b>	Membrane.

## Images



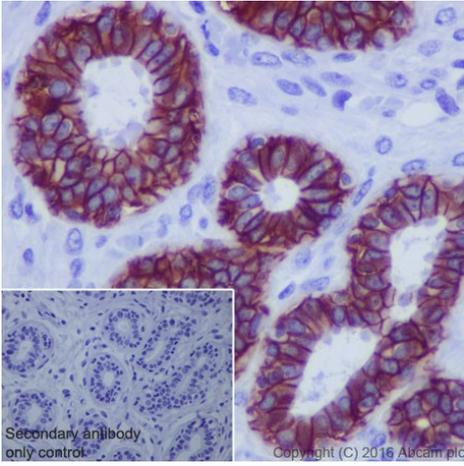
Flow Cytometry - Anti-TROP2 antibody [EPR20043]  
 - Low endotoxin, Azide free (ab222935)

Flow cytometric analysis of 4% paraformaldehyde-fixed MCF7 (Human breast adenocarcinoma cell line) cells labeling TROP2 with [ab214488](#) at 1/60 dilution (red) compared with aRabbit IgG, monoclonal [EPR25A] - Isotype Control ([ab172730](#); black) and an unlabelled control (cells without incubation with primary antibody and secondary antibody; blue). Goat anti rabbit IgG (Alexa Fluor® 488) at 1/2000 dilution was used as the secondary antibody. This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab214488](#)).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TROP2 antibody [EPR20043] - Low endotoxin, Azide free (ab222935)

Immunohistochemical analysis of paraffin-embedded human skin tissue labeling TROP2 with [ab214488](#) at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) at 1/500 dilution. Membrane staining on the squamous epithelium of human skin is observed. Counter stained with Hematoxylin. Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) at 1/500 dilution. This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab214488](#)). Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TROP2 antibody [EPR20043] - Low endotoxin, Azide free (ab222935)

Immunohistochemical analysis of paraffin-embedded human breast tissue labeling TROP2 with [ab214488](#) at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) at 1/500 dilution.

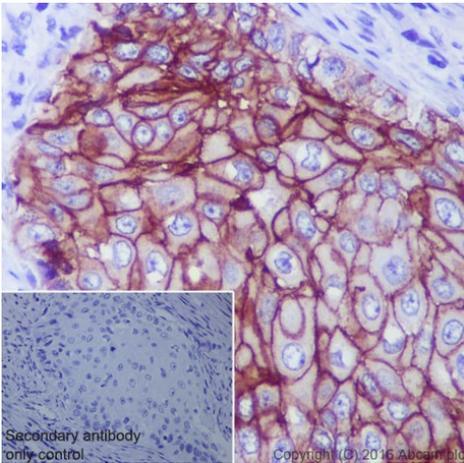
Membrane staining on the duct epithelium of human breast is observed.

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) at 1/500 dilution.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab214488](#)).

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



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TROP2 antibody [EPR20043] - Low endotoxin, Azide free (ab222935)

Immunohistochemical analysis of paraffin-embedded human cervix cancer tissue labeling TROP2 with [ab214488](#) at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) at 1/500 dilution.

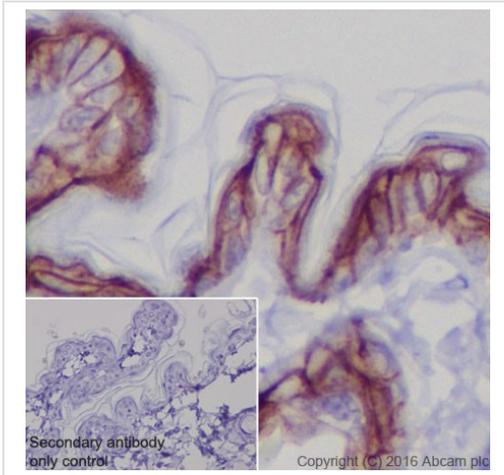
Membrane staining on the tumor cells of human cervix cancer is observed.

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) at 1/500 dilution.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab214488](#)).

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



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TROP2 antibody [EPR20043] - Low endotoxin, Azide free (ab222935)

Immunohistochemical analysis of paraffin-embedded mouse skin tissue labeling TROP2 with [ab214488](#) at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) at 1/500 dilution.

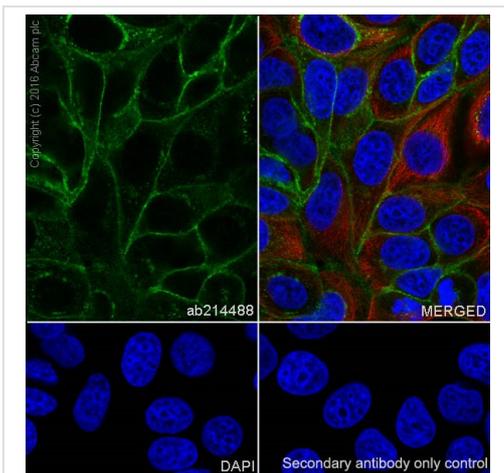
Membrane staining on the squamous epithelium of mouse skin is observed.

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) at 1/500 dilution.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab214488](#)).

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



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TROP2 antibody [EPR20043] - Low endotoxin, Azide free (ab222935)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized MCF7 (Human breast adenocarcinoma cell line) cells labeling TROP2 with [ab214488](#) at 1/100 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor<sup>®</sup> 488) ([ab150077](#)) secondary antibody at 1/1000 dilution (green).

Confocal image showing membrane and weakly cytoplasmic staining on MCF7 cell line.

The nuclear counterstain is DAPI (blue).

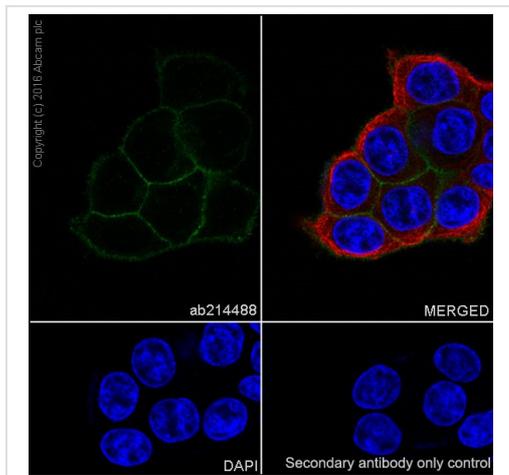
Tubulin is detected with Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor<sup>®</sup> 594) ([ab195889](#)) at 1/200 dilution (red).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (Alexa Fluor<sup>®</sup> 488) ([ab150077](#)) at 1/1000 dilution.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and

sodium azide ([ab214488](#)).

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



Immunocytochemistry/ Immunofluorescence - Anti-TROP2 antibody [EPR20043] - Low endotoxin, Azide free ([ab222935](#))

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HCT 116 (Human colorectal carcinoma cell line) cells labeling TROP2 with [ab214488](#) at 1/100 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor<sup>®</sup> 488) ([ab150077](#)) secondary antibody at 1/1000 dilution (green).

Confocal image showing membrane staining on HCT 116 cell line.

The nuclear counterstain is DAPI (blue).

Tubulin is detected with Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor<sup>®</sup> 594) ([ab195889](#)) at 1/200 dilution (red).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG (Alexa Fluor<sup>®</sup> 488) ([ab150077](#)) at 1/1000 dilution.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab214488](#)).

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