

Anti-TROP2 antibody [162-46.2] ab79976

[1 Abreviews](#) [4 References](#) [4 Images](#)

Overview

Product name	Anti-TROP2 antibody [162-46.2]
Description	Mouse monoclonal [162-46.2] to TROP2
Host species	Mouse
Tested applications	Suitable for: Flow Cyt (Intra), IHC-P, ICC/IF
Species reactivity	Reacts with: Human
Immunogen	Tissue, cells or virus corresponding to Human TROP2. Human choriocarcinoma cell line BeWo.
Positive control	IHC-P: Human placenta tissue. ICC/IF: JEG3 and MCF7 cells. Flow Cyt (Intra): JEG3 and MCF7 cells.
General notes	<p>Isotype: IgG1 (Igh-4a allotype)</p> <p>This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or conjugation for your experiments, please contact orders@abcam.com.</p> <p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
Storage buffer	<p>pH: 7.40</p> <p>Preservative: 0.02% Sodium azide</p> <p>Constituents: PBS, 6.97% L-Arginine</p>
Purity	Protein G purified
Clonality	Monoclonal
Clone number	162-46.2
Isotype	IgG1

Applications

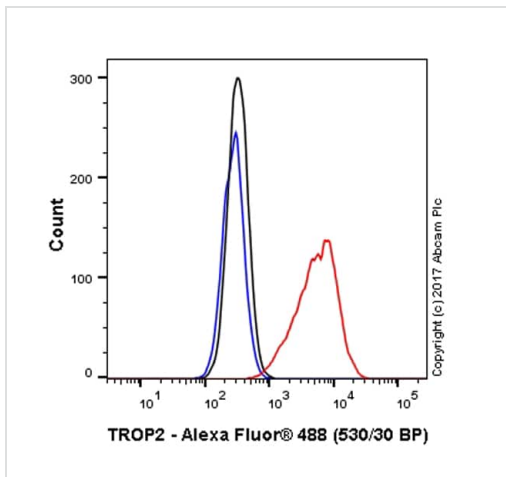
The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab79976 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt (Intra)		Use 0.1-1µg for 10 ⁶ cells. ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.
IHC-P		Use at an assay dependent concentration.
ICC/IF		Use a concentration of 5 µg/ml.

Target

Function	May function as a growth factor receptor.
Tissue specificity	Placenta, pancreatic carcinoma cell lines.
Involvement in disease	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.
Sequence similarities	Belongs to the EPCAM family. Contains 1 thyroglobulin type-1 domain.
Post-translational modifications	The N-terminus is blocked.
Cellular localization	Membrane.

Images



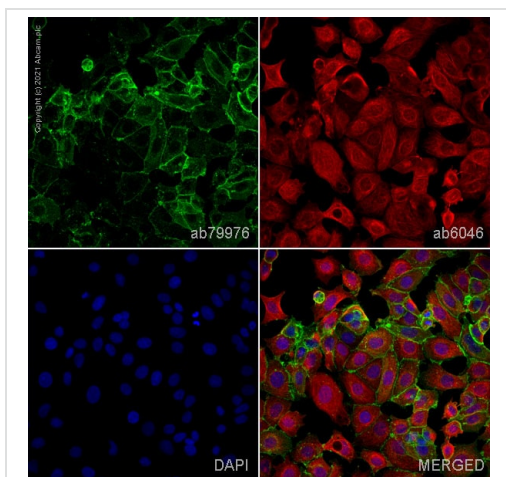
Flow Cytometry (Intracellular) - Anti-TROP2 antibody
[162-46.2] (ab79976)

Overlay histogram showing JEG3 cells stained with ab79976 (red line). The cells were fixed with 4% formaldehyde (10 min) and then permeabilized with 0.1% PBS-Triton X-100 for 15 min. The cells were then incubated in 1x PBS / 10% normal goat serum to block non-specific protein-protein interactions followed by the antibody (ab79976, 0.1 µg/1x10⁶ cells) for 30 min at 22°C. The secondary antibody used was Alexa Fluor® 488 goat anti-mouse IgG (H&L) (**ab150117**) at 1/2000 dilution for 30 min at 22°C.

Isotype control antibody (black line) was mouse IgG1 [15-6E10A7] (monoclonal) (**ab170190**) used at the same concentration and conditions as the primary antibody. Unlabelled sample (blue line) was also used as a control.

Acquisition of >5,000 events were collected using a 50 mW Blue laser (488nm) and 530/30 bandpass filter.

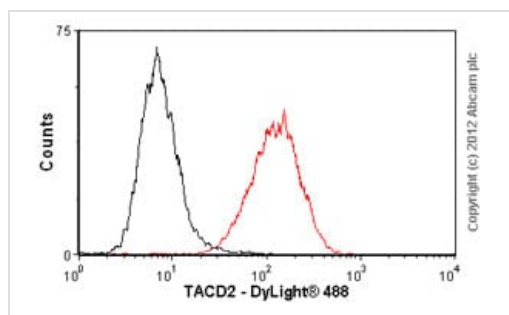
This antibody gave a positive signal in JEG3 cells fixed with 80% methanol (5 min)/permeabilized with 0.1% PBS-Triton X-100 for 15 min used under the same conditions.



Immunocytochemistry/ Immunofluorescence - Anti-TROP2 antibody [162-46.2] (ab79976)

ab79976 staining TROP2 in MCF7 cells. The cells were fixed with 4% paraformaldehyde (10 min), permeabilized with 0.1% PBS-Tween for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated overnight at 4°C with ab79976 at 1 µg/ml and **ab6046**, Rabbit polyclonal to beta Tubulin - Loading Control. Cells were then incubated with **ab150117**, Goat polyclonal Secondary Antibody to Mouse IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 dilution (shown in green) and **ab150080**, Goat polyclonal Secondary Antibody to Rabbit IgG - H&L (Alexa Fluor® 594) at 1/1000 dilution (shown in pseudocolour red). Nuclear DNA was labelled with DAPI (shown in blue).

Image was acquired with a confocal microscope (Leica-Microsystems TCS SP8) and a single confocal section is shown.



Flow Cytometry (Intracellular) - Anti-TROP2 antibody [162-46.2] (ab79976)

Overlay histogram showing MCF7 cells stained with ab79976 (red line). The cells were fixed with 80% methanol (5 min) and incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab79976, 1 µg/1x10⁶ cells) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) (ab96879) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG1 [ICIGG1] (ab91353, 2 µg/1x10⁶ cells) used under the same conditions. Acquisition of >5,000 events was performed. This antibody gave a positive result in 4% paraformaldehyde (10 min) fixed MCF7 cells used under the same conditions.

Please note that Abcam do not have any data for use of this antibody on non-fixed cells. We welcome any customer feedback.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TROP2 antibody [162-46.2] (ab79976)

ab79976 staining TROP2 in human 10 week placenta by Immunohistochemistry, Formalin-fixed, Paraffin-embedded tissue. Anti-mouse peroxidase IgG used as secondary antibody. Note staining of cytotrophoblast (CT) and syncytiotrophoblast (ST).

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

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors