abcam

Product datasheet

Anti-TAP2 antibody ab180611

1 Abreviews 4 References 4 Images

Overview

Product name	Anti-TAP2 antibody
Description	Rabbit polyclonal to TAP2
Host species	Rabbit
Tested applications	**Suitable for:** WB, ICC/IF, IHC-P
Species reactivity	**Reacts with:** Human **Predicted to work with:** Mouse, Rat
Immunogen	Recombinant fragment corresponding to Human TAP2 aa 430-680. Sequence: YGDMLSNVGAAEKVFSYMDRQPNLPSPGTLAPTTLQGVV KFQDVSFAYPN RPDRPVLKGLTFTLRPGEVTALVGPNGSGKSTVAALLQNL YQPTGGQVLL DEKPISQYEHCYLHSQVVSVGQEPVLFSGSVRNNIAYGLQ SCEDDKVMAA AQAAHADDFIQEMEHGIYTDVGEKGSQLAAGQKQRLAIAR ALVRDPRVLI LDEATSALDVQCEQALQDWNSRGDRTVLVIAHRLQTVQR AHQILVLQEGK L Database link: **Q03519** Run BLAST with Run BLAST with
Positive control	Recombinant Human TAP2 protein (**ab132658**) can be used as a positive control in WB. Human placenta extract.
General notes	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. 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

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 long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.30 Preservative: 0.02% Sodium azide Constituents: 49% PBS, 50% Glycerol
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab180611 in the following tested applications.

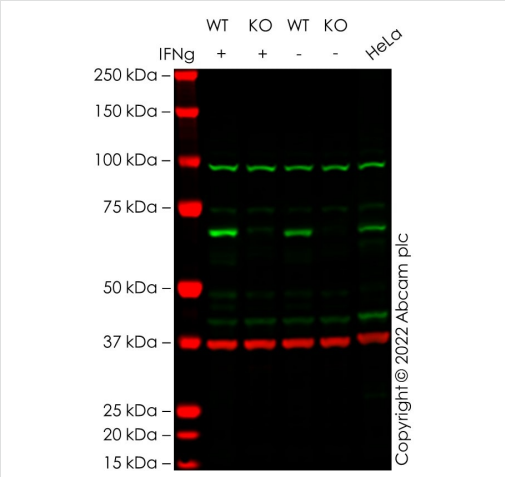
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB	★★★☆☆ **(1)**	1/500 - 1/2000. Predicted molecular weight: 76 kDa.
ICC/IF		Use at an assay dependent concentration.
IHC-P		Use at an assay dependent concentration. **ab171870** - Rabbit polyclonal IgG, is suitable for use as an isotype control with this antibody.

Target

Function	Involved in the transport of antigens from the cytoplasm to the endoplasmic reticulum for association with MHC class I molecules. Also acts as a molecular scaffold for the final stage of MHC class I folding, namely the binding of peptide. Nascent MHC class I molecules associate with TAP via tapasin. Inhibited by the covalent attachment of herpes simplex virus ICP47 protein, which blocks the peptide-binding site of TAP. Inhibited by human cytomegalovirus US6 glycoprotein, which binds to the lumenal side of the TAP complex and inhibits peptide translocation by specifically blocking ATP-binding to TAP1 and prevents the conformational rearrangement of TAP induced by peptide binding. Inhibited by human adenovirus E3-19K glycoprotein, which binds the TAP complex and acts as a tapasin inhibitor, preventing MHC class I/TAP association.
Involvement in disease	Bare lymphocyte syndrome 1
Sequence similarities	Belongs to the ABC transporter superfamily. ABCB family. MHC peptide exporter (TC 3.A.1.209) subfamily. Contains 1 ABC transmembrane type-1 domain. Contains 1 ABC transporter domain.
Domain	The peptide-binding site is shared between the cytoplasmic loops of TAP1 and TAP2.
Cellular localization	Endoplasmic reticulum membrane. The transmembrane segments seem to form a pore in the membrane.

Images



Western blot - Anti-TAP2 antibody (ab180611)

All lanes : Anti-TAP2 antibody (ab180611) at 1/500 dilution

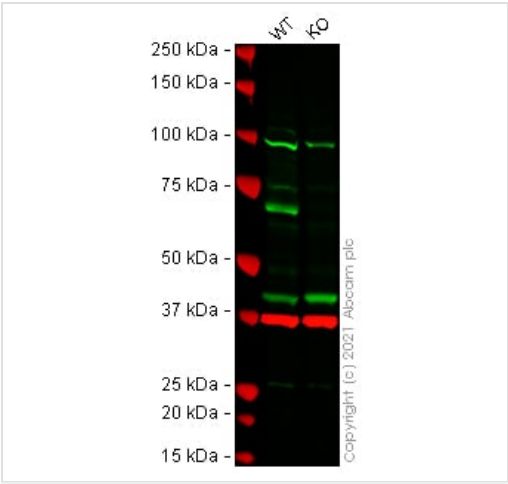
Lane 1 : Wild-type A431 Treated IFNgamma (10 ng/mL, 16 h) cell lysate
Lane 2 : Tap2 knockout A431 Treated IFNgamma (10 ng/mL, 16 h) cell lysate
Lane 3 : Wild-type A431 Vehicle control IFNgamma (0 ng/mL, 16 h) cell lysate
Lane 4 : Tap2 knockout A431 Vehicle control IFNgamma (0 ng/mL, 16 h) cell lysate
Lane 5 : HeLa cell lysate

Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

Predicted band size: 76 kDa
Observed band size: 70 kDa

False colour image of Western blot: Anti-TAP2 antibody staining at 1/500 dilution, shown in green; Mouse anti-GAPDH antibody [6C5] (**ab8245**) loading control staining at 1/20000 dilution, shown in red. In Western blot, ab180611 was shown to bind specifically to TAP2. A band was observed at 70 kDa in treated wild-type A431 cell lysates with no signal observed at this size in Tap2 knockout cell line **ab269617** (knockout cell lysate **ab272427**). To generate this image, wild-type and Tap2 knockout A431 cell lysates were analysed. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in 3 % milk in TBS-0.1 % Tween® 20 (TBS-T) before incubation with primary antibodies overnight at 4 °C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times then imaged. Secondary antibodies used were Goat anti-Rabbit IgG H&L 800CW and Goat anti-Mouse IgG H&L 680RD at 1/20000 dilution.



Western blot - Anti-TAP2 antibody (ab180611)

All lanes : Anti-TAP2 antibody (ab180611) at 1/500 dilution

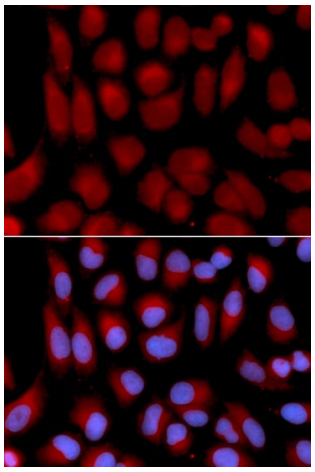
Lane 1 : Wild-type HeLa cell lysate
Lane 2 : Tap2 knockout HeLa cell lysate

Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

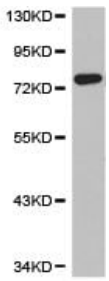
Predicted band size: 76 kDa
Observed band size: 75 kDa

False colour image of Western blot: Anti-TAP2 antibody staining at 1/500 dilution, shown in green; Mouse anti-GAPDH antibody [6C5] (**ab8245**) loading control staining at 1/20000 dilution, shown in red. In Western blot, ab180611 was shown to bind specifically to TAP2. A band was observed at 75 kDa in wild-type HeLa cell lysates with no signal observed at this size in Tap2 knockout cell line **ab265426** (knockout cell lysate **ab258712**). To generate this image, wild-type and Tap2 knockout HeLa cell lysates were analysed. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in 3 % milk in TBS-0.1 % Tween® 20 (TBS-T) before incubation with primary antibodies overnight at 4 °C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times then imaged. Secondary antibodies used were Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed (**ab216776**) at 1/20000 dilution.



Immunocytochemistry/ Immunofluorescence - Anti-TAP2 antibody (ab180611)

Immunocytochemistry/Immunofluorescence analysis of U2OS cells using ab180611. Blue DAPI for nuclear staining.



Western blot - Anti-TAP2 antibody (ab180611)

Anti-TAP2 antibody (ab180611) at 1/500 dilution + Human placenta extract

Predicted band size: 76 kDa

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