

Product datasheet

Anti-CD80 antibody [EPR1157(2)] ab134120

KO VALIDATED Recombinant RabMAb[®]

★★★★☆ **2 Abreviews** **22 References** **7 Images**

Overview

Product name	Anti-CD80 antibody [EPR1157(2)]
Description	Rabbit monoclonal [EPR1157(2)] to CD80
Host species	Rabbit
Tested applications	Suitable for: Flow Cyt (Intra), WB, IHC-P Unsuitable for: ICC/IF
Species reactivity	Reacts with: Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: Raji and Ramos cell lysates. IHC-P: Human tonsil tissue. Flow Cyt (intra): Raji cells.
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none">- High batch-to-batch consistency and reproducibility- Improved sensitivity and specificity- Long-term security of supply- Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p> <p>Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.</p>

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. Stable for 12 months at -20°C.
Storage buffer	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 40% Glycerol (glycerin, glycerine), 0.05% BSA, 59% PBS
Purity	Protein A purified
Clonality	Monoclonal

Clone number EPR1157(2)
Isotype IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab134120 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 at an assay dependent concentration.
WB		1/1000 - 1/10000. Detects a band of approximately 60 kDa (predicted molecular weight: 33 kDa). For unpurified use at 1/500.
IHC-P	★★★★★ (2)	1/1000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Application notes Is unsuitable for ICC/IF.

Target

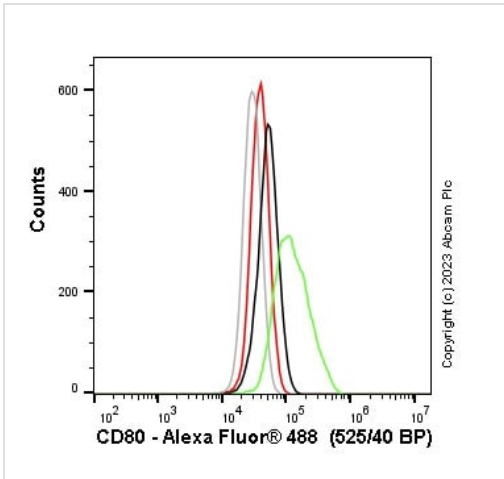
Function Involved in the costimulatory signal essential for T-lymphocyte activation. T-cell proliferation and cytokine production is induced by the binding of CD28 or CTLA-4 to this receptor.

Tissue specificity Expressed on activated B-cells, macrophages and dendritic cells.

Sequence similarities Contains 1 Ig-like C2-type (immunoglobulin-like) domain.
Contains 1 Ig-like V-type (immunoglobulin-like) domain.

Cellular localization Membrane.

Images



Flow Cytometry (Intracellular) - Anti-CD80 antibody [EPR1157(2)] (ab134120)

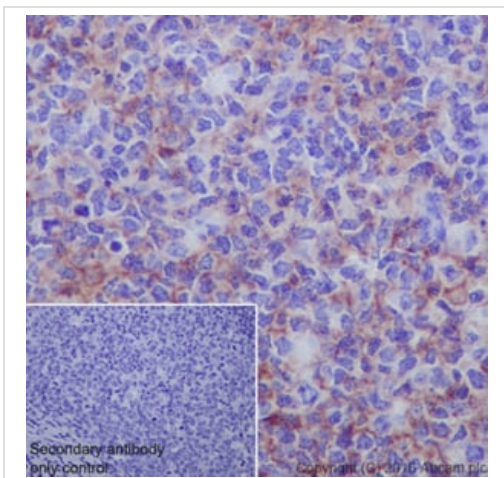
Flow cytometry overlay histogram showing wild-type Raji (green line) and CD80 knockout Raji (red line) stained with ab134120. The cells were fixed with 4% formaldehyde (10 min) and then permeabilised with 0.1% PBS-Triton X-100 for 15 min. The cells were then incubated in 1x PBS containing 10µg/ml human IgG and 10% normal goat serum to block FC receptors and non-specific protein-protein interaction followed by the antibody (ab134120) (1×10^6 in 100µl at 0.2 µg/ml (1/10150)) for 30min at 22°C.

The secondary antibody Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed was incubated at 1/4000 for 30min at 22°C

Isotype control antibody Recombinant Rabbit IgG, monoclonal [EPR25A] - Isotype Control was used at the same concentration and conditions as the primary antibody (wild-type Raji - black line, CD80 knockout Raji - grey line). Unlabelled sample was also used as a control (this line is not shown for the purpose of simplicity).

Acquisition of >5000 events were collected using a 50 mW Blue laser (488nm) and 525/40 bandpass filter.

This antibody gave a positive signal in Raji Fixed with 80% methanol (5 min) / permeabilised with 0.1% PBS-Triton X-100 for 15 min under the same conditions.

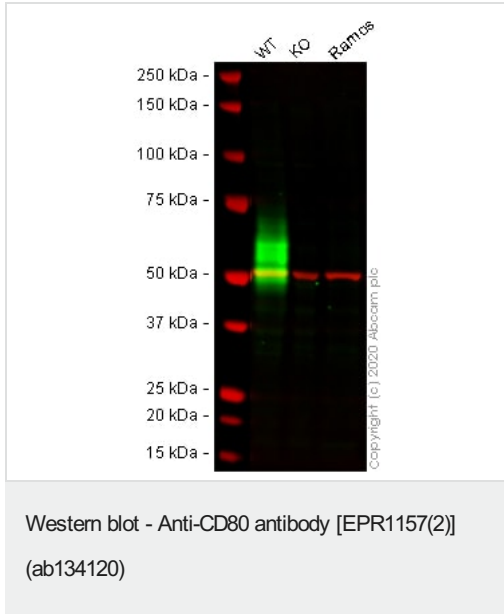


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD80 antibody [EPR1157(2)] (ab134120)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human tonsil tissue labelling CD80 with ab134120 at a dilution of 1/1000. Heat mediated antigen retrieval was performed using Tris/EDTA buffer, pH9 ([ab93684](#)).

ImmunoHistoProbe one step HRP Polymer was used. Counter stained with hematoxylin.

The image shows cytoplasmic and membrane staining.



All lanes : Anti-CD80 antibody [EPR1157(2)] (ab134120) at 1/1000 dilution

Lane 1 : Wild-type Raji (Human Burkitt's lymphoma cell line) whole cell lysate

Lane 2 : CD80 knockout Raji (Human Burkitt's lymphoma cell line) whole cell lysate

Lane 3 : Ramos (Human Burkitt's lymphoma cell line) whole cell lysate

Lysates/proteins at 20 µg per lane.

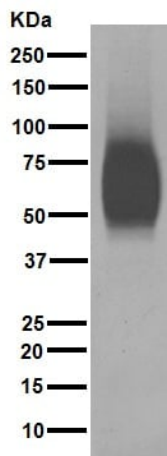
Performed under reducing conditions.

Predicted band size: 33 kDa

Observed band size: 55 kDa

Lanes 1 - 3: Merged signal (red and green). Green - ab134120 observed at 55 kDa. Red - loading control **ab7291** (Mouse anti-Alpha Tubulin [DM1A]) observed at 55kDa.

ab134120 was shown to react with CD80 in wild-type Raji cells in western blot with loss of signal observed in CD80 knockout sample. Wild-type and CD80 knockout Raji cell lysates were subjected to SDS-PAGE. Membranes were blocked in 3% milk in TBS-T (0.1% Tween®) before incubation with ab134120 and **ab7291** (Mouse anti-Alpha Tubulin [DM1A]) overnight at 4°C at a 1 in 1000 Dilution and a 1 in 20000 dilution respectively. Blots were incubated with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed (**ab216776**) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-CD80 antibody [EPR1157(2)]
(ab134120)

Anti-CD80 antibody [EPR1157(2)] (ab134120) at 1/2500 dilution
(purified) + Raji cell lysate at 20 µg

Secondary

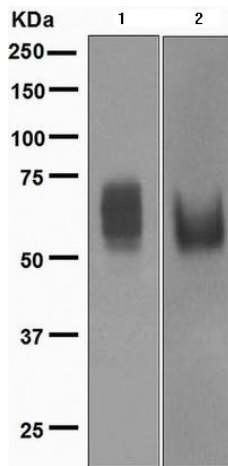
Peroxidase-conjugated goat anti-rabbit IgG (H+L) at 1/1000 dilution

Predicted band size: 33 kDa

Observed band size: 60 kDa

Blocking buffer and concentration: 5% NFDN/TBST.

Diluting buffer and concentration: 5% NFDN/TBST.



Western blot - Anti-CD80 antibody [EPR1157(2)]
(ab134120)

All lanes : Anti-CD80 antibody [EPR1157(2)] (ab134120) at
1/1000 dilution (unpurified)

Lane 1 : Raji cell lysate

Lane 2 : Ramos cell lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat anti-rabbit HRP conjugated antibody at 1/2000
dilution

Predicted band size: 33 kDa

Observed band size: 60 kDa

Tissue Microarray (TMA) data for ab134120							
Normal tissue samples			Malignant tissue samples				
Human cardiac muscle	x	Human placenta	x	Clear cell carcinoma of human kidney	x	Human lung carcinoma	x
Human cerebrum	x	Human skeletal muscle	x	Human bladder cancer	x	Human non-Hodgkin's lymphoma	✓
Human colon	x (immune cells ✓)	Human skin	x (immune cells ✓)	Human breast carcinoma	x	Human ovarian carcinoma	x
Human endometrium	x	Human spleen	x	Human cervical carcinoma	x	Human pancreatic carcinoma	x
Human kidney	x	Human stomach	x	Human colon carcinoma	x	Human prostatic hyperplasia	x
Human liver	x	Human testis	x	Human endometrial carcinoma	x	Human thymoma	x
Human lung	x	Human thyroid	x	Human gastric carcinoma	x	Human thymus hyperplasia	x
Human mammary gland	x	Human tonsil	✓	Human glioma	x	Human thyroid carcinoma	x
Human pancreas	x			Human hepatocellular carcinoma	x		

Tissue Microarrays stained for "Anti-CD80 antibody [EPR1157(2)]" using "ab134120" in immunohistochemical analysis. This table provides a detailed overview of positive (tick mark) and negative (cross mark) staining per sample type tested. The sections were pre-treated using Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0) for 20 minutes. The sections were incubated with ab134120 for 30 mins at room temperature followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**). The immunostaining was performed on a Leica Biosystems BOND® RX instrument.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD80 antibody [EPR1157(2)] (ab134120)

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-CD80 antibody [EPR1157(2)] (ab134120)

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

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