abcam

Product datasheet

Anti-CD80 antibody [EPR1157(2)] - Low endotoxin, Azide free ab224797

KO 評価済　リコンビナント　RabMAb

1 Abreviews　　**3 References**　　画像数 7

製品の概要

製品名	Anti-CD80 antibody [EPR1157(2)] - Low endotoxin, Azide free
製品の詳細	Rabbit monoclonal [EPR1157(2)] to CD80 - Low endotoxin, Azide free
由来種	Rabbit
アプリケーション	**適用あり:** Flow Cyt (Intra), WB, IHC-P **適用なし:** ICC/IF
種交差性	**交差種:** Human
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
ポジティブ・コントロール	WB: Raji and Ramos cell lysates. IHC-P: Human tonsil tissue. Flow Cyt (intra): Raji cells.
特記事項	ab224797 is the carrier-free version of **ab134120**.

Our **carrier-free** antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our **conjugation kits** for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

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**.

Our **Low endotoxin, azide-free formats** have low endotoxin level (≤ 1 EU/ml, determined by the LAL assay) and are free from azide, to achieve consistent experimental results in functional assays.

Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.

製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Store at +4°C. Do Not Freeze.
バッファー	pH: 7.2 Constituent: PBS
キャリア・フリー	はい
精製度	Protein A purified
ポリ/モノ	モノクローナル
クローン名	EPR1157(2)
アイソタイプ	IgG

アプリケーション

The Abpromise guarantee   <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab224797の使用に適用されます

アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
Flow Cyt (Intra)		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Detects a band of approximately 60 kDa (predicted molecular weight: 33 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.

追加情報	Is unsuitable for ICC/IF.

ターゲット情報

機能	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.
組織特異性	Expressed on activated B-cells, macrophages and dendritic cells.
配列類似性	Contains 1 Ig-like C2-type (immunoglobulin-like) domain. Contains 1 Ig-like V-type (immunoglobulin-like) domain.
細胞内局在	Membrane.

画像
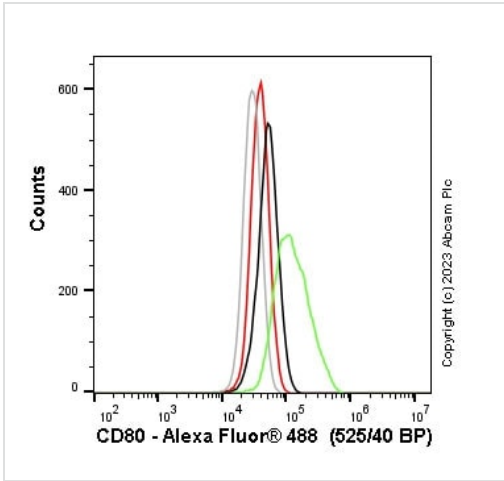
Flow Cytometry (Intracellular) - Anti-CD80 antibody [EPR1157(2)] - Low endotoxin, Azide free (ab224797)

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab134120**).

Flow cytometry overlay histogram showing wild-type Raji (green line) and CD80 knockout Raji stained with **ab134120** (red line). 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**) (1x 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.
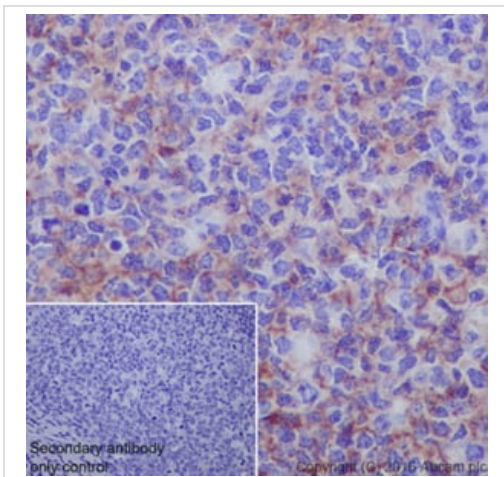

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD80 antibody [EPR1157(2)] - Low endotoxin, Azide free (ab224797)

This IHC data was generated using the same anti-CD80 antibody clone [EPR1157(2)] in a different buffer formulation (cat# **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 Trs/EDTA buffer, pH9 (**ab93684**). ImmunoHistoProbe one step HRP Polymer was used. Counter stained with hematoxylin.

The image shows cytoplasmic and membrane staining.
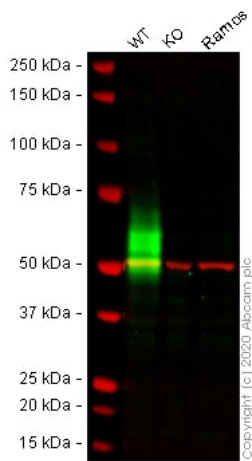
Western blot - Anti-CD80 antibody [EPR1157(2)] - Low endotoxin, Azide free (ab224797)

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.
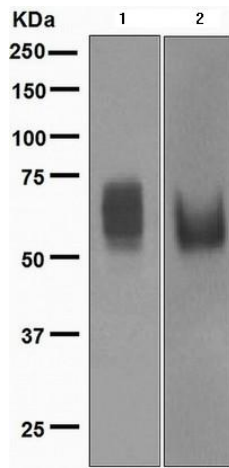
Performed under reducing conditions.

Predicted band size: 33 kDa
Observed band size: 55 kDa

This data was developed using the same antibody clone in a different buffer formulation (**ab134120**).

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)] -
Low endotoxin, Azide free (ab224797)

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

Lane 1 : Raji cell lysate
Lane 2 : Ramos cell lysate
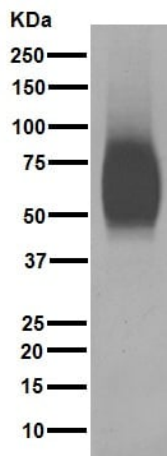
Lysates/proteins at 10 µg per lane.

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

Predicted band size: 33 kDa
Observed band size: 60 kDa

This data was developed using the same antibody clone in a
different buffer formulation containing PBS, BSA, glycerol, and
sodium azide (ab224797)

Western blot - Anti-CD80 antibody [EPR1157(2)] -
Low endotoxin, Azide free (ab224797)

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

This data was developed using the same antibody clone in a
different buffer formulation containing PBS, BSA, glycerol, and
sodium azide (ab224797)

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		

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD80 antibody [EPR1157(2)] - Low endotoxin, Azide free (ab224797)

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.

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)] - Low endotoxin, Azide free (ab224797)

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