

## Product datasheet

### Anti-CD86 antibody [EP1158-37] ab269587

KO VALIDATED RabMAb

[5 References](#) [5 Images](#)

#### Overview

<b>Product name</b>	Anti-CD86 antibody [EP1158-37]
<b>Description</b>	Rabbit monoclonal [EP1158-37] to CD86
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB, IHC-P <b>Unsuitable for:</b> Flow Cyt, ICC/IF or IP
<b>Species reactivity</b>	<b>Reacts with:</b> Human
<b>Immunogen</b>	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	WB: Raji, Daudi, Jurkat, Human tonsil and Human spleen lysates. IHC-P: Human non-Hodgkin lymphoma and Human tonsil tissues.
<b>General notes</b>	<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> <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&amp;As</p>

#### Properties

<b>Form</b>	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>	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol, 0.05% BSA
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal

<b>Clone number</b>	EP1158-37
<b>Isotype</b>	IgG

## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab269587 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

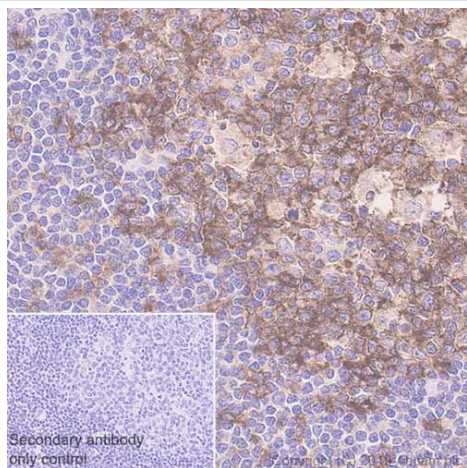
Application	Abreviews	Notes
<b>WB</b>		1/1000. Detects a band of approximately 80 kDa (predicted molecular weight: 38 kDa).
<b>IHC-P</b>		1/100. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

**Application notes** Is unsuitable for Flow Cyt, ICC/IF or IP.

## Target

<b>Function</b>	Receptor involved in the costimulatory signal essential for T-lymphocyte proliferation and interleukin-2 production, by binding CD28 or CTLA-4. May play a critical role in the early events of T-cell activation and costimulation of naive T-cells, such as deciding between immunity and anergy that is made by T-cells within 24 hours after activation. Isoform 2 interferes with the formation of CD86 clusters, and thus acts as a negative regulator of T-cell activation.
<b>Tissue specificity</b>	Expressed by activated B-lymphocytes and monocytes.
<b>Sequence similarities</b>	Contains 1 Ig-like C2-type (immunoglobulin-like) domain. Contains 1 Ig-like V-type (immunoglobulin-like) domain.
<b>Post-translational modifications</b>	Polyubiquitinated; which is promoted by MARCH8 and results in endocytosis and lysosomal degradation.
<b>Cellular localization</b>	Membrane.

## Images

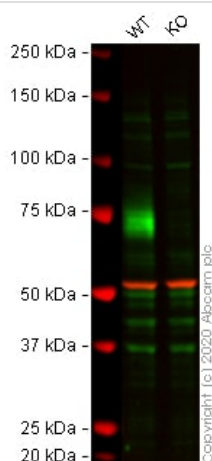


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD86 antibody [EP1158-37] (ab269587)

Immunohistochemical analysis of paraffin-embedded Human tonsil tissue labeling CD86 with ab269587 at 1/100 dilution (2.52 ug/ml) followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB ([ab209101](#)). Positive staining on human tonsil (PMID: 22740445). The section was incubated with ab269587 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND<sup>®</sup> RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB ([ab209101](#)).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20 mins.



Western blot - Anti-CD86 antibody [EP1158-37] (ab269587)

**All lanes** : Anti-CD86 antibody [EP1158-37] (ab269587) at 1/1000 dilution

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

**Lane 2** : CD86 knockout Raji (Human Burkitt's lymphoma cell line) whole cell lysate

Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

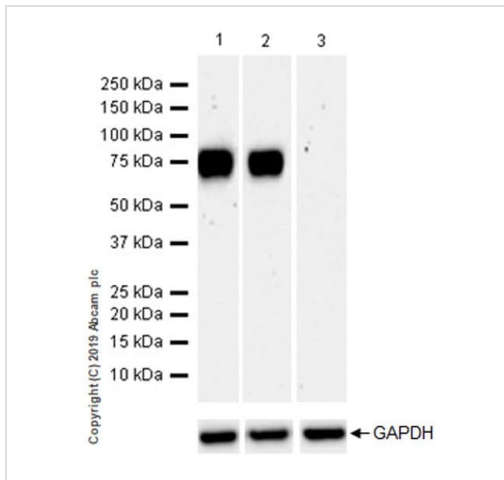
**Predicted band size:** 38 kDa

**Observed band size:** 70 kDa

**Lanes 1 - 2:** Merged signal (red and green). Green - ab269587 observed at 70 kDa. Red - loading control [ab7291](#) (Mouse anti-Alpha Tubulin [DM1A]) observed at 55kDa.

ab269587 was shown to react with CD86 in wild-type Raji cells in western blot with loss of signal observed in CD86 knockout sample. Wild-type and CD86 knockout Raji cell lysates were subjected to SDS-PAGE. Membranes were blocked in 3% milk in TBS-T (0.1% Tween<sup>®</sup>) before incubation with ab269587 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<sup>®</sup> 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-CD86 antibody [EP1158-37] ([ab269587](#))

**All lanes :** Anti-CD86 antibody [EP1158-37] ([ab269587](#)) at 1/1000 dilution

**Lane 1 :** Raji (human Burkitt's lymphoma B lymphocyte) whole cell lysate

**Lane 2 :** Daudi (human Burkitt's lymphoma lymphoblast) whole cell lysate

**Lane 3 :** Jurkat (human t cell leukemia t lymphocyte) whole cell lysate

Lysates/proteins at 20 µg per lane.

### Secondary

**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/100000 dilution

**Predicted band size:** 38 kDa

**Observed band size:** 80 kDa

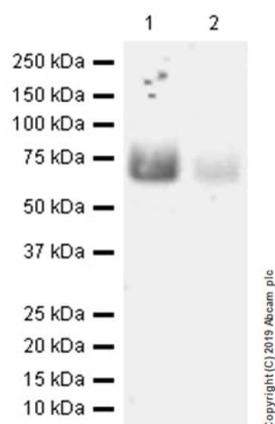
Blocking and dilution buffer: 5% NFDM/TBST.

Exposure time: 3 minutes.

**Negative control:** Jurkat (PMID: 9973476).

The actual band size higher than predicted is mainly due to glycosylation.

The molecular weight observed is consistent with what has been described in the literature (PMID:27464357, 21896490).



Western blot - Anti-CD86 antibody [EP1158-37]  
(ab269587)

**All lanes :** Anti-CD86 antibody [EP1158-37] (ab269587) at 1/1000 dilution

**Lane 1 :** Human tonsil lysate

**Lane 2 :** Human spleen lysate

Lysates/proteins at 20 µg per lane.

#### Secondary

**All lanes :** VeriBlot for IP Detection Reagent (HRP) ([ab131366](#)) at 1/1000 dilution

**Predicted band size:** 38 kDa

**Observed band size:** 80 kDa

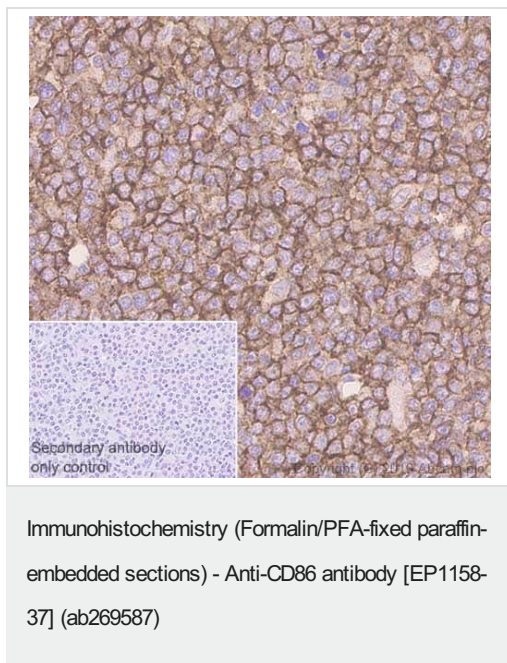
Blocking and dilution buffer: 5% NFDM/TBST.

Exposure time: 3 minutes.

The actual band size higher than predicted is mainly due to glycosylation.

The molecular weight observed is consistent with what has been described in the literature (PMID:27464357, 21896490).

This blot was developed using a higher sensitivity ECL substrate.



Immunohistochemical analysis of paraffin-embedded Human non-Hodgkin lymphoma tissue labeling CD86 with ab269587 at 1/100 dilution (2.52 ug/ml) followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**). Positive staining on human non-Hodgkin lymphoma (PMID: 9767448,10089910). The section was incubated with ab269587 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20 mins.

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

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