**Overview**

**Product name**  
Anti-PD-L1 antibody [28-8] (Alexa Fluor® 488)

**Description**  
Rabbit monoclonal [28-8] to PD-L1 (Alexa Fluor® 488)

**Host species**  
Rabbit

**Conjugation**  
Alexa Fluor® 488. Ex: 495nm, Em: 519nm

**Tested applications**  
Suitable for: Flow Cyt, ICC/IF

**Species reactivity**  
Reacts with: Human

**Immunogen**  
Recombinant full length protein corresponding to Human PD-L1 (extracellular). The immunogen contains the specific extracellular domain of huPD-L1 (Phe19-Thr239). See reference for more info - [www.ncbi.nlm.nih.gov/pmc/articles/PMC4561627/](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4561627/)  
Database link: Q9NZQ7

**Positive control**  
ICC/IF: PDL1 transfected CHO cells. Flow Cyt: PDL1 transfected CHO cells.

**General notes**  
Anti-PD-L1 antibody [28-8] has been used as detector antibody in Human PD-L1 SimpleStep ELISA® kit ([ab214565](https://www.abcam.com/))

Additional information on positive controls:

**Cell Lines:**  
Positives: B-CPAP- high, ES-2- medium, HCC70 - low

For primary negative control, isotype control, RabMAb negative control antibody ([ab172730](https://www.abcam.com/)) is recommended.

For negative control sample, cell line COLO205 is recommended.

For PD-L1 protein, see [ab167713](https://www.abcam.com/).

Alternative versions available:


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](https://www.abcam.com/).

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to [RabMAb® patents](https://www.abcam.com/).
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**Properties**

<table>
<thead>
<tr>
<th>Form</th>
<th>Liquid</th>
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</thead>
</table>
| Storage buffer | pH: 7.40  
Preservative: 0.02% Sodium azide  
Constituents: 1% BSA, 30% Glycerol, PBS |
| Purity        | Immunogen affinity purified |
| Clonality     | Monoclonal   |
| Clone number  | 28-8         |
| Isotype       | IgG          |

**Applications**

Our Abpromise guarantee covers the use of ab209959 in the following tested applications.

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

<table>
<thead>
<tr>
<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flow Cyt</td>
<td>1/50.</td>
<td></td>
</tr>
<tr>
<td>ICC/IF</td>
<td>1/100.</td>
<td>This product gave a positive signal in CHO-PDL1 cells fixed with 4% formaldehyde (10 min)</td>
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</table>

**Target**

**Function**

Involved in the costimulatory signal, essential for T-cell proliferation and production of IL10 and IFNG, in an IL2-dependent and a PDCD1-independent manner. Interaction with PDCD1 inhibits T-cell proliferation and cytokine production.
**Tissue specificity**
Highly expressed in the heart, skeletal muscle, placenta and lung. Weakly expressed in the thymus, spleen, kidney and liver. Expressed on activated T- and B-cells, dendritic cells, keratinocytes and monocytes.

**Sequence similarities**
Belongs to the immunoglobulin superfamily. BTN/MOG family.
Contains 1 Ig-like C2-type (immunoglobulin-like) domain.
Contains 1 Ig-like V-type (immunoglobulin-like) domain.

**Cellular localization**
Cell membrane and Endomembrane system.

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**Images**

Ab209959 staining PDL1 in CHO-PDL1 cells. The lower panels demonstrate that ab209959 does not cross react with un-transfected CHO cells.

The cells were fixed with 4% formaldehyde (10 min), permeabilized with 0.1% Triton X-100 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 ab209959 at a 1/100 dilution (shown in green) and ab195889, Mouse monoclonal to alpha Tubulin (Alexa Fluor® 594), at a 1/250 dilution (shown in red). Nuclear DNA was labelled with DAPI (shown in blue).

Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).

Overlay histogram showing CHO (blue line) and PDL1 transfected CHO (red line) cells stained with ab209959.

The cells were incubated in 1x PBS / 10% normal goat serum to block non-specific protein-protein interactions followed by the antibody (ab209959, 1/50 dilution) for 30 min at 4°C.

Acquisition of >5,000 events were collected using a 20mW solid-state laser (488nm) and 530/30 bandpass filter.

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