

#### Goat Anti-CD274 / PD-L1 Antibody

Peptide-affinity purified goat antibody Catalog # AF1215a

### **Specification**

### Goat Anti-CD274 / PD-L1 Antibody - Product Information

Application FC, WB, IHC, IF

Primary Accession <u>Q9NZQ7</u>

Other Accession <u>NP\_054862</u>, <u>29126</u>

Reactivity
Host
Clonality
Concentration
Isotype
Calculated MW
Human
Goat
Polyclonal
0.5mg/ml
IgG
33275

# Goat Anti-CD274 / PD-L1 Antibody - Additional Information

#### **Gene ID 29126**

#### **Other Names**

Programmed cell death 1 ligand 1, PD-L1, PDCD1 ligand 1, Programmed death ligand 1, B7 homolog 1, B7-H1, CD274, CD274, B7H1, PDCD1L1, PDCD1LG1, PDL1

#### **Format**

0.5 mg lgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

#### Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

### **Precautions**

Goat Anti-CD274 / PD-L1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

### Goat Anti-CD274 / PD-L1 Antibody - Protein Information

### Name CD274 (HGNC:17635)

## **Function**

Plays a critical role in induction and maintenance of immune tolerance to self (PubMed:<a href="http://www.uniprot.org/citations/11015443" target="\_blank">11015443</a>, PubMed:<a href="http://www.uniprot.org/citations/28813417" target="\_blank">28813417</a>, PubMed:<a href="http://www.uniprot.org/citations/28813410" target="\_blank">28813410</a>). As a ligand for the inhibitory receptor PDCD1/PD-1, modulates the activation threshold of T-cells and limits T-cell effector response (PubMed:<a href="http://www.uniprot.org/citations/11015443"



target="\_blank">11015443</a>, PubMed:<a href="http://www.uniprot.org/citations/28813417" target="\_blank">28813417</a>, PubMed:<a href="http://www.uniprot.org/citations/28813410" target="\_blank">28813410</a>). Through a yet unknown activating receptor, may costimulate T-cell subsets that predominantly produce interleukin-10 (IL10) (PubMed:<a href="http://www.uniprot.org/citations/10581077" target="\_blank">10581077</a>). Can also act as a transcription coactivator: in response to hypoxia, translocates into the nucleus via its interaction with phosphorylated STAT3 and promotes transcription of GSDMC, leading to pyroptosis (PubMed:<a href="http://www.uniprot.org/citations/32929201" target=" blank">32929201</a>).

#### **Cellular Location**

Cell membrane; Single-pass type I membrane protein. Early endosome membrane; Single-pass type I membrane protein. Recycling endosome membrane; Single-pass type I membrane protein. Nucleus. Note=Associates with CMTM6 at recycling endosomes, where it is protected from being targeted for lysosomal degradation (PubMed:28813417). Translocates to the nucleus in response to hypoxia via its interaction with phosphorylated STAT3 (PubMed:32929201). [Isoform 2]: Endomembrane system; Single-pass type I membrane protein

### **Tissue Location**

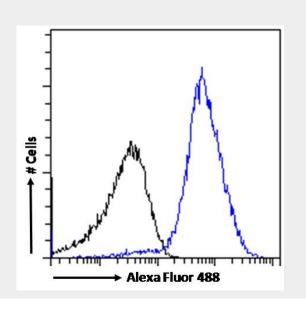
Highly expressed in the heart, skeletal muscle, placenta and lung. Weakly expressed in the thymus, spleen, kidney and liver. Expressed on activated T- and B-cells, dendritic cells, keratinocytes and monocytes.

### Goat Anti-CD274 / PD-L1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

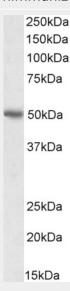
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# Goat Anti-CD274 / PD-L1 Antibody - Images

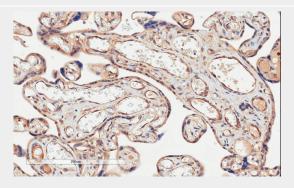




AF1215a Flow cytometric analysis of paraformaldehyde fixed Jurkat cells (blue line), permeabilized with 0.5% Triton. Primary incubation 1hr (10ug/ml) followed by Alexa Fluor 488 secondary antibody (1ug/ml). IgG control: Unimmunized goat IgG (black line) f



AF1215a ( $0.01\mu g/ml$ ) staining of Human Heart lysate ( $35\mu g$  protein in RIPA buffer). Detected by chemiluminescence.



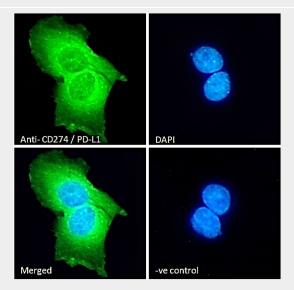
AF1215a (2µg/ml) staining of paraffin embedded Human Placenta. Microwaved antigen retrieval with citrate buffer pH 6, HRP-staining. **This data is from a previous batch, not on sale.** 



AF1215a (0.1µg/ml) staining of U2OS cell lysate (35µg protein in RIPA buffer). Detected by



### chemiluminescence.



AF1215a Immunofluorescence analysis of paraformaldehyde fixed AA431 cells, permeabilized with 0.15% Triton. Primary incubation 1hr (10ug/ml) followed by Alexa Fluor 488 secondary antibody (2ug/ml), showing cytoplasmic staining. The nuclear stain is DAPI (



AF1215a Immunofluorescence analysis of paraformaldehyde fixed U2OS cells, permeabilized with 0.15% Triton. Primary incubation 1hr (10ug/ml) followed by Alexa Fluor 488 secondary antibody (2ug/ml), showing membrane and cytoplasmic staining. The nuclear sta

#### Goat Anti-CD274 / PD-L1 Antibody - References

An approach based on a genome-wide association study reveals candidate loci for narcolepsy. Shimada M, et al. Hum Genet, 2010 Oct. PMID 20677014.

Role played by the programmed death-1-programmed death ligand pathway during innate immunity against Mycobacterium tuberculosis. Alvarez IB, et al. J Infect Dis, 2010 Aug 15. PMID 20617899.

The programmed death 1/programmed death ligand 1 inhibitory pathway is up-regulated in rheumatoid synovium and regulates peripheral T cell responses in human and murine arthritis. Raptopoulou AP, et al. Arthritis Rheum, 2010 Jul. PMID 20506224.

[Expression of B7-H1 on peripheral myeloid dendritic cells in patients with HIV infection and its correlation with diseases progression] Wang XC, et al. Zhonghua Yi Xue Za Zhi, 2010 Mar 9. PMID 20450779.





PD-1 on immature and PD-1 ligands on migratory human Langerhans cells regulate antigen-presenting cell activity. Pe□a-Cruz V, et al. J Invest Dermatol, 2010 Sep. PMID 20445553.