

**Goat Anti-PDCD1 Antibody**  
**Peptide-affinity purified goat antibody**  
**Catalog # AF1800a****Specification**

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**Goat Anti-PDCD1 Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">Q15116</a>
Other Accession	<a href="#">NP_005009</a> , <a href="#">5133</a>
Reactivity	Human
Predicted	Mouse, Rat, Dog, Cow
Host	Goat
Clonality	Polyclonal
Concentration	100ug/200ul
Isotype	IgG
Calculated MW	31647

**Goat Anti-PDCD1 Antibody - Additional Information****Gene ID** 5133**Other Names**

Programmed cell death protein 1, Protein PD-1, hPD-1, CD279, PDCD1, PD1

**Format**

0.5 mg IgG/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-PDCD1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Goat Anti-PDCD1 Antibody - Protein Information****Name** PDCD1 {ECO:0000303|PubMed:7851902, ECO:0000312|HGNC:HGNC:8760}**Function**

Inhibitory receptor on antigen activated T-cells that plays a critical role in induction and maintenance of immune tolerance to self (PubMed:<a href="http://www.uniprot.org/citations/21276005" target="\_blank">21276005</a>). Delivers inhibitory signals upon binding to ligands CD274/PDCD1L1 and CD273/PDCD1LG2 (PubMed:<a href="http://www.uniprot.org/citations/21276005" target="\_blank">21276005</a>). Following T-cell receptor (TCR) engagement, PDCD1 associates with CD3-TCR in the immunological synapse

and directly inhibits T-cell activation (By similarity). Suppresses T-cell activation through the recruitment of PTPN11/SHP-2: following ligand-binding, PDCD1 is phosphorylated within the ITSM motif, leading to the recruitment of the protein tyrosine phosphatase PTPN11/SHP-2 that mediates dephosphorylation of key TCR proximal signaling molecules, such as ZAP70, PRKCQ/PKCtheta and CD247/CD3zeta (By similarity).

#### Cellular Location

Cell membrane; Single-pass type I membrane protein

### Goat Anti-PDCD1 Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### Goat Anti-PDCD1 Antibody - Images



AF1800a (2 µg/ml) staining of Bone marrow lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

### Goat Anti-PDCD1 Antibody - Background

This gene encodes a cell surface membrane protein of the immunoglobulin superfamily. This protein is expressed in pro-B-cells and is thought to play a role in their differentiation. In mice, expression of this gene is induced in the thymus when anti-CD3 antibodies are injected and large numbers of thymocytes undergo apoptosis. Mice deficient for this gene bred on a BALB/c background developed dilated cardiomyopathy and died from congestive heart failure. These studies suggest that this gene product may also be important in T cell function and contribute to the prevention of autoimmune diseases.

## Goat Anti-PDCD1 Antibody - References

Association Between Hepatitis B Viral Burden in Chronic Infection and a Functional Single Nucleotide Polymorphism of the PDCD1 Gene. Zheng L, et al. J Clin Immunol, 2010 Aug 11. PMID 20700634.

[Study on the relationship of the haplotypes of programmed cell death 1 gene and ultraviolet history with systemic lupus erythematosus.] Peng C, et al. Zhonghua Yi Xue Yi Chuan Xue Za Zhi, 2010 Aug. PMID 20677149.

[Programmed cell death 1 (PDCD1) gene polymorphisms and type 1 diabetes in Chilean children] Flores S, et al. Rev Med Chil, 2010 May. PMID 20668808.

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.

PTPN22, PDCD1 and CYP27B1 polymorphisms and susceptibility to type 1 diabetes in Polish patients. Fichna M, et al. Int J Immunogenet, 2010 Jun 1. PMID 20518841.