10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-PDCD1 / PD1 / CD279 (Programmed Cell Death 1) Antibody

Recombinant Rabbit Monoclonal Antibody
Catalog # AH13422

Product Information

Application	IHC-P, IF, FC
Primary Accession	Q15116
Other Accession	158297
Reactivity	Human
Host	Rabbit
Clonality	Monoclonal
Isotype	Rabbit / IgG
Clone Names	PDCD1/1410R
Calculated MW	31647

Additional Information

Gene ID	5133
Other Names	CD279; hPD-1; hSLE1; PD1; PDCD1; Programmed Cell Death Protein 1; Protein PD-1; SLEB2; Systemic lupus erythematosus susceptibility 2
Application Note	Flow Cytometry (0.5-1ug/million cells); Immunofluorescence (1-2ug/ml); ,Immunohistology (Formalin-fixed) (1-2ug/ml for 30 minutes at RT),(Staining of formalin-fixed tissues requires boiling tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 10-20 min followed by cooling at RT for 20 minutes),Optimal dilution for a specific application should be determined.
Format	200ug/ml of Ab purified by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.
Storage	Store at 2 to 8°C.Antibody is stable for 24 months.
Precautions	Anti-PDCD1 / PD1 / CD279 (Programmed Cell Death 1) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

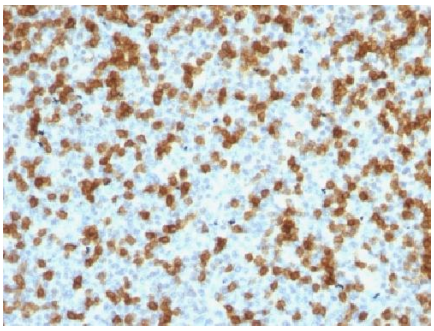
Name	PDCD1 {ECO:0000303|PubMed:7851902, ECO:0000312|HGNC:HGNC:8760}
Function	Inhibitory receptor on antigen activated T-cells that plays a critical role in induction and maintenance of immune tolerance to self (PubMed:21276005, PubMed:37208329). Delivers inhibitory signals upon binding to ligands CD274/PDCD1L1 and CD273/PDCD1LG2 (PubMed:21276005). 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

Background

PDCD-1 (programmed cell death-1 protein), also designated CD279, is a type I transmembrane receptor and a member of the immunoglobin gene superfamily. It is expressed on activated T-cells, B-cells, and myeloid cells. Anti-PDCD-1 is a marker of angioimmunoblastic lymphoma and suggests a unique cell of origin for this neoplasm. Unlike CD10 and BCL6, PDCD-1 is expressed by few B-cells, so anti-PDCD-1 may be a more specific and useful diagnostic marker in angioimmunoblastic lymphoma. In addition, PDCD-1 expression provides evidence that angioimmunoblastic lymphoma is a neoplasm derived from germinal center-associated T-cells.

Images



Formalin-fixed, paraffin-embedded human Tonsil stained with PD1 (CD279) Recombinant Rabbit Monoclonal Antibody (PDCD1/1410R).