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Anti-PD-1 Antibody

Catalog # ABO12724

Product Information

Application	WB
Primary Accession	Q15116
Host	Rabbit
Reactivity	Human, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Programmed cell death protein 1(PDCD1) detection. Tested with WB in Human;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	5133
Other Names	Programmed cell death protein 1, Protein PD-1, hPD-1, CD279, PDCD1, PD1
Calculated MW	31647
Application Details	Western blot, 0.1-0.5 □g/ml, Human, Rat
Subcellular Localization	Membrane; Single-pass type I membrane protein.
Source	Eukaryota
Protein Name	Programmed cell death protein 1
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Immunogen	E.coli-derived human PD1 recombinant protein (Position: P101-L288). Human PD1 shares 59% amino acid (aa) sequence identity with mouse PD1.
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins
Storage	At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.

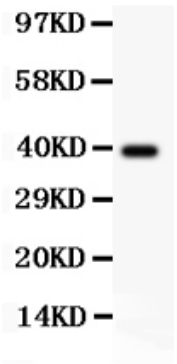
Protein Information

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:31754127, PubMed:32184441, PubMed:37208329). Delivers inhibitory signals upon binding to ligands CD274/PDCD1L1 and CD273/PDCD1LG2 (PubMed:21276005, PubMed:26602187). Following T-cell receptor (TCR) engagement, PDCD1 associates with TCR-CD3 in the immunological synapse and directly inhibits T-cell activation (PubMed:32184441). 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 (PubMed:32184441).
Cellular Location	Cell membrane; Single-pass type I membrane protein

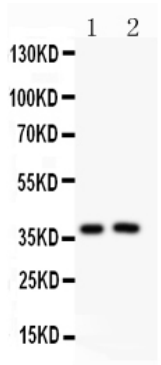
Background

PDCD1(Programmed cell death 1), also called PD1, encodes a cell surface receptor that is a member of the B7 superfamily involved in immunomodulation. This gene is mapped to 2q37.3. PDCD1 acts as an inhibitory molecule on T cells after interacting with its ligands PDL1 and PDL2. The PDCD1 gene contains 5 exons. This protein is expressed in pro-B-cells and is thought to play a role in their differentiation. Using flow cytometric analysis, It has been found that expression of PDCD1 was upregulated on CD16-positive and CD16-negative monocytes, but not on dendritic cells, in viremic HIV-positive patients, but not in highly active antiretroviral therapy (HAART)-treated HIV-positive patients. PDCD1 upregulation in monocytes was induced by microbial Toll-like receptor ligands and inflammatory cytokines.

Images



Anti-PD1 Picoband antibody , ABO12724-1.jpgAll lanes: Anti PD1 (ABO12724) at 0.5ug/mlWB: Recombinant Human PD1 Protein 0.5ng Predicted bind size: 38KDObserved bind size: 38KD



Anti-PD1 Picoband antibody , ABO12724-2.jpgAll lanes: Anti PD1 (ABO12724) at 0.5ug/mlLane 1: JURKAT Whole Cell Lysate at 40ugLane 2: Human Placenta Tissue Lysate at 50ugPredicted bind size: 32KD Observed bind size: 38KD

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.