

PDCD1 (IN) antibody (pAb)

Rabbit Anti-Human/Mouse/Rat PDCD1 (PD-1, IN)

Instruction Manual

Catalog Number	PK-AB718-4067
Synonyms	PD-1 Antibody; Programmed cell death 1, PDCD1, CD279
Description	Cell-mediated immune responses are initiated by T lymphocytes that are themselves stimulated by cognate peptides bound to MHC molecules on antigen-presenting cells (APC). T-cell activation is generally self-limited as activated T cells express receptors such as PD-1 (also known as PDCD-1) that mediate inhibitory signals from the APC. PD-1 can bind two different but related ligands, PDL-1 and PDL-2. Upon binding to either of these ligands, signals generated by PD-1 inhibit the activation of the immune response in the absence of "danger signals" such as LPS or other molecules associated with bacteria or other pathogens. Evidence for this is seen in PD1-null mice who exhibit hyperactivated immune systems and autoimmune diseases. Despite its predicted molecular weight, PD-1 often migrates at higher molecular weight in SDS-PAGE.
Quantity	100 µg
Source / Host	Rabbit
Immunogen	PDCD1 antibody was raised in rabbits against a 16 amino acid peptide from near the center of human PDCD1.
Purification Method	Affinity chromatography purified via peptide column.
Clone / IgG Subtype	Polyclonal antibody
Species Reactivity	Human, Mouse, Rat
Specificity	
Formulation	Antibody is supplied in PBS containing 0.02% sodium azide.
Reconstitution	During shipment, small volumes of antibody will occasionally become entrapped in the seal of the product vial. For products with volumes of 200 µl or less, we recommend gently tapping the vial on a hard surface or briefly centrifuging the vial in a tabletop centrifuge to dislodge any liquid in the container's cap.
Storage & Stability	Antibody can be stored at 4°C for three months and at -20°C for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Applications	E, WB, IHC INote: Antibody might be suitable for other applications not tested so far. Optimal concentrations for each application have to be determined individually. PD-1 antibody can be used for detection of PD-1 by Western blot at 1 µg/mL. Despite its predicted molecular weight, PD-1 often migrates at higher molecular weight in SDS-PAGE. Antibody can also be used for immunohistochemistry starting at 5 µg/mL.
Images	Available upon request.
References	Holling TM, Schooten E, and van Den Elsing PJ. Function and regulation of MHC class II molecules in T-lymphocytes: of mice and men. Hum. Immunol. 2004; 65:282-90. Ishida Y, Agata Y, Shibahara K, et al. Induced expression of PD-1, a novel member of the immunoglobulin gene superfamily, upon programmed cell death. EMBO J. 1992; 11:3887-95. Zhong X, Bai C, Gao W, et al. Suppression of expression and function of negative immune regulator PD-1 by certain pattern recognition and cytokine receptor signals associated with immune system danger. Int. Immunol. 2004; 16:1181-8. Nishimura H, Nose M, Hiai H, et al. Development of lupus-like autoimmune diseases by the disruption of the PD-1 gene encoding an ITIM motif-carrying immunoreceptor. Immunity 1999; 11:141-51.
Images	Available upon request.
Related Products	Cat.No. PK-AB718-4067P; PDCD1 Peptide Cat.No. PK-AB718-1208; THP-1 Cell Lysate

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