

CD279 polyclonal antibody

Catalog: BS67725

Host: I

Rabbit

Reactivity: Human, Mouse, Rat

BackGround:

The programmed cell death 1 protein (PD-1, PDCD1, CD279) is a member of the CD28 family of immunoreceptors that regulate T cell activation and immune responses. The PD-1 protein contains an extracellular Ig V domain, a transmembrane domain, and a cytoplasmic tail that includes an immunoreceptor tyrosine-based inhibitory motif (ITIM) and an immunoreceptor tyrosine-based switch motif (ITSM). PD-1 is activated by the cell surface ligands PD-L1 and PD-L2. Upon activation, PD-1 ITIM and ITSM phosphorylation leads to the recruitment of the protein tyrosine phosphatases SHP-1 and SHP-2, which suppress TCR signaling. In addition to activated T cells, PD-1 is expressed in activated B cells and monocytes, although its function in these cell types has not been fully characterized. The PD-1 pathway plays an important role in immune tolerance; however, research studies show that cancer cells often adopt this pathway to escape immune surveillance. Consequently, blockade of PD-1 and its ligands is proving to be a sound strategy for neoplastic intervention.

Product:

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.

Molecular Weight:

~ 70 kDa

Swiss-Prot:

Q15116

Purification&Purity:

The antibody was purified by immunogen affinity chromatography.

Applications:

WB (1/500 - 1/1000), IHC (1/100 - 1/500), IF/ICC (1/100 - 1/500)

Storage&Stability:

Store at 4 $^{\circ}$ C short term. Aliquot and store at -20 $^{\circ}$ C long

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term. Avoid freeze-thaw cycles.

Specificity:

Recognizes endogenous levels of CD279 protein. **DATA:**



Western blot analysis of CD279 expression in Raji (A), mouse spleen (B), rat thymus (C) whole cell lysates.



Immunohistochemical analysis of CD279 staining in human skin formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of CD279 staining in U2OS cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for

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PRODUCT DATA SHEET

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5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a Alexa Fluor 488-conjugated secondary antibody (green) in PBS at room temperature in the dark.

Note:

For research use only, not for use in diagnostic procedure.

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