

## PRODUCT DATA SHEET

Bioworld Technology,Inc.

# **CD279 monoclonal antibody**

Catalog: MB66093 Host: Mouse Reactivity: Human

#### **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:**

Mouse IgG1. Liquid in PBS containing 50% glycerol, 0.2% BSA and 0.01% sodium azide.

#### **Molecular Weight:**

~ 31 kDa

#### **Swiss-Prot:**

Q15116

## **Purification&Purity:**

The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen and the purity is > 95% (by SDS-PAGE).

## **Applications:**

IHC (1/100 - 1/300)

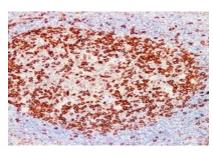
# Storage&Stability:

Store at  $4\,\mathrm{C}$  short term. Aliquot and store at -20  $\mathrm{C}$  long term. Avoid freeze-thaw cycles.

### **Specificity:**

Recognizes endogenous levels of CD279 protein.

#### **DATA:**



Immunohistochemical analysis of CD279 staining in human tonsil 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.

#### Note:

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

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