

Anti-PD-1 Antibody (90437)

Product Details

Ig Type:	Rabbit IgG
Reactivity:	Human
Conjugation:	Unconjugated
Clone:	90437
Purification:	Affinity-chromatography

Applications

Verified Activity:	1. Western Blot -Positive WB detected in: MCF-7 whole cell lysate -All lanes: PD1 antibody at 1:2000 -Secondary: Goat polyclonal to rabbit IgG at 1/50000 dilution -Predicted band size: 32 KDa -Observed band size: 32 kDa
	2. IHC image of TMAH-00865 diluted at 1:100 and staining in paraffin-embedded human tonsil tissue performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.
Application:	ELISA,IHC,WB
Recommended	WB:1:500-1:5000; IHC:1:50-1:200.

Properties

Stability & Storage:	Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles.
Shipping:	Shipping with blue ice.

Antigen Details

Immunogen:	A synthetic peptide: Human PD1
Antigen Species:	Human
Gene ID:	5133
Uniprot ID:	Q15116
Synonyms:	PDCD1;CD279;SLEB2;PD-1;PD1
Biology Area:	Cancer, Cell biology, Immunology

Research Background

Inhibitory receptor on antigen activated T-cells that plays a critical role in induction and maintenance of immune tolerance to self. Delivers inhibitory signals upon binding to ligands CD274/PDCD1L1 and CD273/PDCD1LG2. Following T-cell receptor (TCR) engagement, PDCD1 associates with CD3-TCR in the immunological synapse and

directly inhibits T-cell activation. 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. The PDCD1-mediated inhibitory pathway is exploited by tumors to attenuate anti-tumor immunity and escape destruction by the immune system, thereby facilitating tumor survival. The interaction with CD274/PDCD1L1 inhibits cytotoxic T lymphocytes (CTLs) effector function. The blockage of the PDCD1-mediated pathway results in the reversal of the exhausted T-cell phenotype and the normalization of the anti-tumor response, providing a rationale for cancer immunotherapy.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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