



## Mouse Anti-Human PD-1 monoclonal antibody, clone N05 (CABT-ZB577)

This product is for research use only and is not intended for diagnostic use.

### PRODUCT INFORMATION

<b>Specificity</b>	It reacts with Human PD-1
<b>Target</b>	PDCD1
<b>Immunogen</b>	Recombinant Human PD-1 Protein
<b>Isotype</b>	IgG1
<b>Source/Host</b>	Mouse
<b>Species Reactivity</b>	Human
<b>Clone</b>	N05
<b>Purification</b>	Protein A purified
<b>Conjugate</b>	Unconjugated
<b>Applications</b>	ELISA(cap) We recommend the following for sandwich ELISA (Capture - Detection): CABT-ZB577 - CABT-ZB931 This antibody will detect PD-1 in antibody pair set. [ABPR-ZB154]
<b>Preparation</b>	This antibody was produced from a hybridoma resulting from the fusion of a mouse myeloma with B cells obtained from a mouse immunized with purified, recombinant Human PD-1. The IgG fraction of the cell culture supernatant was purified by Protein A affinity chromatography.
<b>Format</b>	Purified, Liquid
<b>Concentration</b>	Lot specific

<b>Size</b>	50 $\mu$ L, 100 $\mu$ L, 200 $\mu$ L, 1 mL
<b>Buffer</b>	PBS
<b>Preservative</b>	None
<b>Storage</b>	This antibody can be stored at 2°C-8°C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20°C to -80°C. Preservative-Free. Avoid repeated freeze-thaw cycles.
<b>Ship</b>	Wet ice

## BACKGROUND

**Introduction** Programmed cell death 1, also known as PDCD1, is a type I transmembrane glycoprotein, and is an immunoreceptor belonging to the CD28/CTLA-4 family negatively regulates antigen receptor signaling by recruiting protein tyrosine phosphatase, SHP-2 upon interacting with either of two ligands, PD-L1 or PD-L2. PD1 inhibits the T-cell proliferation and production of related cytokines including IL-1, IL-4, IL-10 and IFN- $\gamma$  by suppressing the activation and transduction of PI3K/AKT pathway. In addition, coligation of PD1 inhibits BCR-mediated signal by dephosphorylating key signal transducer. PD1 has been suggested to be involved in lymphocyte clonal selection and peripheral tolerance, and thus contributes to the prevention of autoimmune diseases. Furthermore, PD1 is shown to be a regulator of virus-specific CD8+ T cell survival in HIV infection. As a cell surface molecule, PDCD1 regulates the adaptive immune response. Engagement of PD-1 by its ligands PD-L1 or PD-L2 transduces a signal that inhibits T-cell proliferation, cytokine production, and cytolytic function.

**Keywords** PDCD1; programmed cell death 1; PD1; PD-1

## GENE INFORMATION

**Synonyms** PDCD1; programmed cell death 1; PD1; PD-1; CD279; SLEB2; hPD-1; hPD-I; hSLE1; programmed cell death protein 1; protein PD-1; systemic lupus erythematosus susceptibility 2

**Entrez Gene ID** [5133](#)

**UniProt ID** [Q15116](#)