

# CoraLite488-conjugated PD-1/CD279 Monoclonal ANTIBODY

Catalog Number: CL488-66220

## Basic Information

<b>Catalog Number:</b> CL488-66220	<b>GenBank Accession Number:</b> BC074740	<b>Recommended Dilutions:</b> IF 1:50-1:500
<b>Size:</b> 100 µg/ 100 µl	<b>GenID (NCBI):</b> 5133	<b>Excitation/Emission maxima wavelengths:</b> 488 nm/515 nm
<b>Source:</b> Mouse	<b>Full Name:</b> programmed cell death 1	
<b>Isotype:</b> IgG2b	<b>Calculated MW:</b> 288aa, 32 kDa	
<b>Purification Method:</b> Protein A purification	<b>Observed MW:</b>	
<b>Immunogen Catalog Number:</b> AG12470		

## Applications

<b>Tested Applications:</b> IF, ELISA	<b>Positive Controls:</b> IF : human tonsillitis tissue;
<b>Species Specificity:</b> human, rat, mouse	

## Background Information

Programmed cell death 1 (PD-1, also known as CD279) is an immunoinhibitory receptor that belongs to the CD28/CTLA-4 subfamily of the Ig superfamily. It is a 288 amino acid (aa) type I transmembrane protein composed of one Ig superfamily domain, a stalk, a transmembrane domain, and an intracellular domain containing an immunoreceptor tyrosine-based inhibitory motif (ITIM) as well as an immunoreceptor tyrosine-based switch motif (ITSM) (PMD: 18173375). PD-1 is expressed during thymic development and is induced in a variety of hematopoietic cells in the periphery by antigen receptor signaling and cytokines (PMD: 20636820). 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 (PMD: 19426218). It is critical for the regulation of T cell function during immunity and tolerance. Blockade of PD-1 can overcome immune resistance and also has been shown to have antitumor activity (PMD: 22658127; 23169436). The calculated molecular weight of PD-1 is 32 kDa. It has been reported that PD-1 is heavily glycosylated and migrates with an apparent molecular mass of 47-55 kDa on SDS-PAGE (PMD: 8671665; 17640856; 17003438). This antibody is CL488(Ex/Em 488 nm/515 nm) conjugated.

## Notable Publications

Author	Pubmed ID	Journal	Application
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## Storage

**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:

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This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

## Selected Validation Data



Immunofluorescent analysis of (4% PFA) fixed human tonsillitis tissue using CL488-66220 (PD-1/CD279 antibody) at dilution of 1:50.