

Mouse PD-1 Antibody Pair Set

Catalog No. E-KAB-0310

Applications

ELISA

Synonyms CD279, PD1, PD-1, SLEB2

Kit components & Storage

Title	Specifications	Storage
Mouse PD-1 Capture Antibody	1 vial, 100 µg	Store at -20°C for one year. Avoid freeze / thaw cycles.
Mouse PD-1 Detection Antibody (Biotin)	1 vial, 50 µL	Store at -20°C for one year. Avoid freeze / thaw cycles.

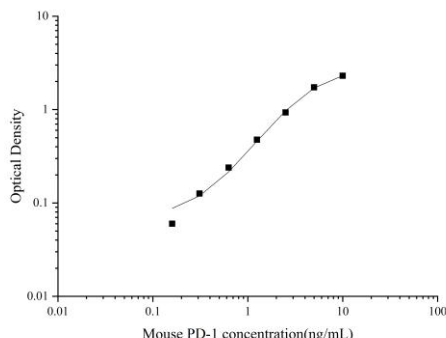
Note: Centrifuge before opening to ensure complete recovery of vial contents.

Product Information

Items		Characteristic (E-KAB-0310)	
		Mouse PD-1 Capture Antibody	Mouse PD-1 Detection Antibody (Biotin)
Immunogen Information	Immunogen	Recombinant Mouse PD-1 protein	Recombinant Mouse PD-1 protein
	Swissprot	Q02242	
Product details	Reactivity	Mouse	Mouse
	Host	Rabbit	Rabbit
	Conjugation	Unconjugated	Biotin
	Concentration	0.5mg/mL	/
	Buffer	PBS with 0.04% Proclin 300, 50% glycerol, pH 7.4	PBS with 0.04% Proclin 300, 1% protective protein, 50% glycerol, pH 7.4
	Purify	Protein A & Antigen Affinity	Protein A & Antigen Affinity
	Specificity	Detects Mouse PD-1 in ELISAs.	

Applications

Mouse PD-1 Sandwich ELISA Assay:

	Recommended Concentration/Dilution	Reagent	Images																
ELISA Capture	0.5-4µg/mL	Mouse PD-1 Capture Antibody	 <table border="1"> <caption>Approximate data points from the standard curve</caption> <thead> <tr> <th>Mouse PD-1 concentration (ng/mL)</th> <th>Optical Density</th> </tr> </thead> <tbody> <tr> <td>0.1</td> <td>0.05</td> </tr> <tr> <td>0.2</td> <td>0.1</td> </tr> <tr> <td>0.5</td> <td>0.2</td> </tr> <tr> <td>1</td> <td>0.4</td> </tr> <tr> <td>2</td> <td>0.7</td> </tr> <tr> <td>5</td> <td>1.2</td> </tr> <tr> <td>10</td> <td>1.8</td> </tr> </tbody> </table>	Mouse PD-1 concentration (ng/mL)	Optical Density	0.1	0.05	0.2	0.1	0.5	0.2	1	0.4	2	0.7	5	1.2	10	1.8
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ELISA Detection	1:1000-1:10000	Mouse PD-1 Detection Antibody (Biotin)																	

Note: This standard curve is only for demonstration purposes. A standard curve should be generated for each assay!

Background

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). 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. 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. 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. 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.