

43-1074: Monoclonal Antibody to Mouse CD279 (PD-1) NALE™ Purified (Clone: J43.1)

Clonality :	Monoclonal
Clone Name :	J43.1
Application :	FACS
Reactivity :	Mouse
Gene :	Pdcd1
Gene ID :	18566
Uniprot ID :	Q02242
Alternative Name :	Pd1
Isotype :	Armenian Hamster IgG

Description

The J43.1 monoclonal antibody specifically reacts with mouse CD279, also known as PD-1 (programmed death-1), a 50-55 kDa glycoprotein of the Ig superfamily. The PD-1 ligands, PD-L1 (B7-H1) and PD-L2 (B7-H2) are members of the B7 family. Pd-1 contains an Immunoreceptor Tyrosine-based Inhibitory Motif (ITIM) and influences the peripheral tolerances and autoimmune diseases in mice. PD-1 is transiently expressed on CD4/CD8 thymocytes, it is upregulated in apoptotic cells, and it is expressed by activated myeloid and T and B cells. The binding of PD-1 to its ligands is blocked by the J43 antibody, which also enhances contact hypersensitivity and exacerbates acute Graft-versus-host disease, Experimental autoimmune encephalomyelitis and NOD diabetes. PD-1 seems to downregulate the immune response, as the development of splenomegaly and breakdown of peripheral tolerance in PD-1 deficient mice suggests.

Product Info

Amount :	100 µg
Content :	2.0 mg/ml in Phosphate-buffered aqueous solution, pH7.2.
Storage condition :	The product should be stored undiluted at 4°C. Do not freeze. The monoclonal antibody was purified utilizing affinity chromatography. The endotoxin level is determined by LAL test to be less than 0.01 EU/µg of the protein.

Application Note

The antibody has been analyzed for quality through the flow cytometric analysis of the relevant cell type. It is recommended that the reagent be titrated for optimal performance for each application.