
Anti-human PD-1 (6D5)

Type	Size	Catalog number
Unconjugated	100µg	112701
	500µg	112703

Antigen:	Anti-PD-1
Immunogen:	PD1 transfected HEK293 cells
Host/Isotype:	Mouse, IgG1, κ
Reactivity:	Human
Purity:	>90% pure tested via polyacrylamide gel electrophoresis (PAGE)
Formulation:	PBS, pH7.2, 0.09% NaN ₃
Storage:	Store at 2-8°C.
Applications:	Flow Cytometry

Application Information

Each lot of this antibody has been quality control tested by flow cytometric analysis in PD-1 transfected NIH-3T3 cells. For flow cytometric staining, the recommended use of this antibody is $\leq 0.5\mu\text{g}$ per 1×10^6 cells in 100µl of staining volume followed by a secondary florescent conjugated anti-mouse antibody. It is strongly suggested that the antibody reactivity be empirically titrated for optimal performance in the application of interest.

Antigen Information

The clone 6D5, a mouse monoclonal antibody selectively binds with a 50-55 kD cell surface protein commonly known as Programmed cell death 1 (PD-1) or CD279, a member of the immunoglobulin superfamily. PD-1 expression is mostly observed in activated T cells and B cells, and also in dendritic cells. PD-1 signals via binding its two ligands, PD-L1 and PD-L2. Upon ligand binding, PD-1 signaling inhibits T-cell activation, leading to reduced proliferation, cytokine production, and T cell death. Blocking of PD-1 by its antibody restores T cells immunity against tumor and infectious agents. PD-1-blockade based immunotherapy is, therefore, highly clinically useful against various types of cancers and infectious diseases.

References

1. Keir, M.E, *et al.* 2008. *Annu. Rev. Immunol.* 26:677-704.
2. Barber, D.L., *et al.* 2006. *Nature.* 439: 682-687.
3. Day, C. L., *et al.* 2006. *Nature.* 443:350-354.
4. Kozako, T, *et al.* 2009. *Leukemia.* 23:375-382.
5. Thibult, M.L., *et al.* 2013. *Int. Immunol.* 25:129-137.
6. Sponaas, A-M, *et al.* 2015. *PLoS One.* 10:e0139867
7. Iwai, Y., *et al.* 2017. *J. Biomed. Science.* 24:26.

Terms and Conditions

This product is for research use only (RUO) and not intended for diagnostic testing.