

Anti-human PD-1 (8G10)

Type	Size	Catalog number
Unconjugated	100µg	125201
	500µg	125203
PE	25 tests	125224
	100 tests	125225
	200 tests	125226
Biotin	100ug	125251

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 ≤ 0.5µg (for purified and biotin conjugated) per 1x10⁶ cells in 100µl staining volume followed by a florescent conjugated anti-mouse secondary antibody or fluorescent conjugated streptavidine (SA) or 5µl (conjugated) is sufficient for staining 1 million cells in a 100µl staining volume or 100µl whole blood. It is strongly suggested that the antibody reactivity be empirically titrated for optimal performance in the application of interest.

Antigen Information

The clone 8G10, 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.