

## Anti-human PD-1 (8G10)

### Analyte Specific Reagent (ASR)\*

Type	Number of tests	Volume per test (μL)	Total volume (μL)	Catalog number
PE	50	5	250	4252022
	100	5	500	4252025

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

### 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.

\*Analyte Specific Reagent. The analytical and performance characteristics of this ASR product are not established.