

## IVMB0435

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### Product Information

<b>Product SKU:</b> IVMB0435	<b>Clone:</b> 5C4.B8	<b>Target:</b> PD-1
<b>Size:</b> 50 µg		<b>Isotype:</b> Human IgG1κ

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### Additional Information

<b>Reactivity:</b> Human/Cynomolgus Monkey	<b>Host Species:</b> Human
<b>Antibody Type:</b> Biosimilar Recombinant Human Monoclonal Antibody	<b>Expression Host:</b> HEK-293 Cells

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### Immunogen Information

**Background:** Programmed cell death protein 1 (PD-1) is a protein on the surface of cells that plays a role in the maintenance of self-tolerance. PD-1 promotes self-tolerance via the down-regulation of the immune system which results in the suppression of T cell inflammatory activity. PD-L1 and PD-L2 are the two ligands known to bind PD-1. PD-L1 has increased expression in several cancers.<sup>1</sup> PD-L2 has a more limited expression and is primarily expressed by dendritic cells and only some tumor lines. Inhibition of the interaction of PD-1 with its ligands can function as an immune checkpoint blockade through the improvement of In vitro T-cell responses and via the mediation of anti-tumor activity.<sup>2</sup> Nivolumab disrupts the negative signal that is responsible for T-cell activation and proliferation by binding to PD-1 on activated immune cells to selectively block the interaction of the PD-1 receptor with its ligands.<sup>3</sup> Emerging research suggests that combined blockade of PD-1 and CTLA-4, with nivolumab and ipilimumab respectively, could produce greater antitumor activity than blockade of either pathway alone.<sup>4</sup> This cost-effective, research-grade Anti-Human CD279 (PD-1) (Nivolumab) utilizes the same variable regions from the therapeutic antibody Nivolumab making it ideal for research projects.

**Endotoxin Level:** < 1.0 EU/mg as determined by the LAL method

**Applications:** FC

**Synonyms:** PD1; PD-1; CD279; SLEB2; hPD-1; hPD-I; hSLE1

<b>Antigen Distribution:</b>	PD-1 is expressed on a subset of CD4-CD8- thymocytes, and on activated T and B cells.
<b>Immunogen:</b>	Human PD-1
<b>Formulation:</b>	This Allophycocyanin (APC) conjugate is formulated in 0.01 M phosphate buffered saline (150 mM NaCl) PBS pH 7.4, 1% BSA and 0.09% sodium azide as a preservative.
<b>Specificity:</b>	This non-therapeutic biosimilar antibody uses the same variable region sequence as the therapeutic antibody Nivolumab. Clone 5C4.B8 binds to the extracellular portion of Human/Cynomolgus PD-1 and does not bind to other IgG superfamily proteins. This product is for research use only.
<b>Pathogen Testing:</b>	-
<b>Storage &amp; Handling:</b>	This Allophycocyanin (APC) conjugate is stable when stored at 2-8°C. Do not freeze.