

## 12-8041: Anti-Human CD279 (PD-1) (Nivolumab) - Fc Muted™

<b>Clonality :</b>	Monoclonal
<b>Clone Name :</b>	5C4.B8
<b>Alternative Name :</b>	PD1; PD-1; CD279; SLEB2; hPD-1; hPD-L; hSLE1
<b>Isotype :</b>	Human IgG1k
<b>Immunogen Information :</b>	Human PD-1

### Description

Expression Host : HEK-293

Pathogen Testing : To protect mouse colonies from infection by pathogens and to assure that experimental preclinical data is not affected by such pathogens, all of this recombinant biosimilar antibodies are tested and guaranteed to be negative for all pathogens in the IDEXX IMPACT I Mouse Profile.

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.

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.

### Product Info

<b>Amount :</b>	100 µg
<b>Purification :</b>	>=95% monomer by analytical SEC
	Concentration : >= 5.0 mg/ml
<b>Content :</b>	This biosimilar antibody is aseptically packaged and formulated in 0.01 M phosphate buffered saline (150 mM NaCl) PBS pH 7.2 - 7.4 with no carrier protein, potassium, calcium or preservatives added.
<b>Storage condition :</b>	Functional grade biosimilar antibodies may be stored sterile as received at 2-8°C for up to one month. For longer term storage, aseptically aliquot in working volumes without diluting and store at -80°C. Avoid Repeated Freeze Thaw Cycles.

### Application Note

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

The suggested concentration for Nivolumab biosimilar antibody for staining cells in flow cytometry is <= 0.25 µg per 10<sup>6</sup> cells in a volume of 100 µl. Titration of the reagent is recommended for optimal performance for each application.