

12-8039: Anti-Human CD279 (PD-1) (Nivolumab) - DyLight® 488

Clonality :	Monoclonal
Clone Name :	5C4.B8
Application :	Functional Assay
Alternative Name :	PD1; PD-1; CD279; SLEB2; hPD-1; hPD-I; hSLE1
Isotype :	Human IgG1k
Immunogen Information :	Human PD-1

Description

Expression Host : HEK-293

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.¹ 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.² 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.³ 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.⁴ 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

Amount :	100 µg
	Concentration : 0.2 mg/ml
Content :	This DyLight® 488 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.
Storage condition :	This DyLight® 488 conjugate is stable when stored at 2-8°C. Do not freeze.

Application Note

The suggested concentration for Nivolumab biosimilar antibody for staining cells in flow cytometry is ≤ 1.0 µg per 10^6 cells in a volume of 100 µl. Titration of the reagent is recommended for optimal performance for each application.