
Product Datasheet

PD-1 Antibody (orb1821656)

Description

PD-1 Antibody

Species/Host

Human

Reactivity

Human, Monkey

Conjugation

Unconjugated

Tested Applications

Blocking, FC, IHC, SBR

Immunogen

mAb PD1.5 was prepared by immunizing IgH and IgK knock-out transgenic mice possessing a human immunoglobulin (heavy chain) minilocus with recombinant human PD-1-Fc protein consisting of the extracellular domain of PD-1 (amino acids 1-167) and the Fc portion of human IgG1, and Chinese hamster ovary (CHO) cells expressing human PD-1. Nivolumab was generated by grafting the variable regions of PD1.5 onto human kappa and IgG4 constant regions containing an S228P mutation (prevents Fab arm exchange with endogenous IgG4 antibodies).

Target

PD-1

Preservatives

PBS with 0.02% Proclin 300.

Concentration

1 mg/ml

Storage

Store at 4°C for up to 3 months. For longer storage, aliquot and store at -20°C.

Note

For research use only

Application notes

Nivolumab has been shown to bind to PD-1-expressing CHO cells (EC50 ~1.66nM). Nivolumab binds CD4+ T cells (EC50 ~0.64 nM) and stains only memory and effector, and not naive CD4+ or CD8+ T cells from human peripheral blood by FC. The antibody is able to block the interaction between PD-1 and its ligands PDL-1 and PDL-2 (IC50 ~2.52 nM and ~2.59 nM, respectively - determined by SPR) - these IC50 values are also similar to that measured by FACS to evaluate ligand binding to PD-1 expressed on CHO cells. In an allogenic T-cell/DC MLR, Nivolumab-mediated inhibition of PD-1 results in enhancement of IFN γ release, and also enhances IL-2 secretion (97-139% over an isotype control) in response to the superantigen SEB using human peripheral blood mononuclear cells. The same is also observed in a CMV-restimulation assay. Nivolumab at very

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