

Catalog# BP-50534

Nivolumab Biosimilar, Human PD-1 Monoclonal Antibody

Nivolumab is a humanized IgG4 antibody targeting the immune checkpoint programmed death receptor-1 (PD-1). This antibody was produced entirely in mice and grafted onto human kappa and IgG4 Fc region with the mutation S228P for additional stability and reduced variability. Nivolumab Biosimilar uses the same protein sequences as the therapeutic antibody nivolumab.

PD-L1 and PD-L2 (B2-DC or CD273, programmed cell death ligand 2) are the two ligands for the receptor PD-1 (CD279, programmed cell death protein 1).

Nivolumab blocks PD-1 inhibitory signaling to T-cells. It has a long duration of action as it is administered every 2-4 weeks. Patients should be counselled regarding the risk of immune-mediated adverse effects, infusion-related adverse effects, complications of allogenic hematopoietic stem cell transplants, embryo-fetal toxicity.

The ligands PD-L1 and PD-L2 bind to the PD-1 receptor on T-cells, inhibiting the action of these cells. Tumor cells express PD-L1 and PD-L2. Nivolumab binds to PD-1, preventing PD-L1 and PD-L2 from inhibiting the action of T-cells, restoring a patient's tumor-specific T-cell response.

Product Details	
CAS No.	946414-94-4
Species Reactivity	Human
Source	Nivolumab biosimilar CHO stable cell line
Isotype	Human IgG4 kappa
Class	Monoclonal
Type	Antibody
Clone	Nivolumab Biosimilar
Conjugate	Unconjugated
Immunogen	Human type II CD20 antibodies
Purity	>95%
Molecular Weight	143.62 kDa
Protein Concentration	1 mg/ml
Formulation	0.2 μ M filtered PBS solution, pH 6.0
Storage conditions	4°C for short time, -20°C or -80°C for long time.