Catalog# BP-50536

Cemiplimab Biosimilar, PD-1 Monoclonal Antibody

Cemiplimab Biosimilar uses the same protein sequences as the therapeutic antibody cemiplimab. 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). Cemiplimab (anti-PD-1) is an intravenous human monoclonal antibody directed against programmed cell death-1 receptor (PD-1) and blocks its interaction with programmed death ligands 1 (PD-L1) and 2 (PD-L2). Cemiplimab blocks T-cell inactivation and enhances the immune system's anti-tumor response. Binding of the programmed death receptor (PD) ligands PD-L1 and PD-L2, to the PD-1 receptor inhibits T-cell proliferation and cytokine production. The upregulation of PD-1 ligands occurs in some tumors and signaling through this pathway may contribute to the inhibition of active T-cell immune surveillance of tumors. Cemiplimab is a recombinant human immunoglobulin G4 (IgG4) monoclonal antibody that binds to the PD-1 receptor and blocks its interaction with PD-L1 and PD-L2 ligands, causing PD-1 pathway-mediated inhibition of the immune response, including the anti-tumor immune response. In mouse tumor models, blocking PD-1 activity resulted in decreased rates of tumor growth.

Product Details	
CAS No.	1801342-60-8
Species Reactivity	Human
Source	Mammalian cells
Isotype	Human IgG4 kappa
Class	Monoclonal
Type	Antibody
Clone	Cemiplimab Biosimilar
Conjugate	Unconjugated
Immunogen	Human programmed cell death protein 1 (PD-1), antagonizing its interaction with its known ligands PD-L1 and PD-L2
Purity	>95%
Molecular Weight	143.57 kDa
Protein Concentration	1 mg/ml
Formulation	0.2 μM filtered PBS solution, pH 7.4
Storage conditions	4°C for short time, -20°C or -80°C for long time.