

Lipustobart Biosimilar - Research Grade

Product Code: ICH5254

More Information

Species Reactivity: Human

Target: PD-1

Concentration: >1mg/ml

Isotype: Human IgG4 - kappa

Host: CHO Cells

product name H2: Lipustobart Biosimilar - Research Grade

Antibodies against the same target: [Anti-Mouse PD-1 \(29F.1A12\) In Vivo Antibody - Low Endotoxin \(ICH1091\)](#), [Anti-PD-1 \(RMP1-14\) \(ICH1132\)](#), [Anti-Mouse PD-1 \(RMP1-14\) Recombinant Antibody \(ICH1182\)](#), [Mouse Anti-Mouse PD-1 \(29F.1A12\) Recombinant Antibody \(ICH1211\)](#), [Anti-Mouse PD-1 \(RMP1-30\) In Vivo Antibody - Low Endotoxin \(ICH1246\)](#), [Anti-Human PD-1 \(J110\) In Vivo Antibody - Low Endotoxin \(ICH1272\)](#), [Nivolumab Biosimilar - Research Grade \(ICH4009\)](#), [Pembrolizumab Biosimilar - Research Grade \(ICH4029\)](#), [Sintilimab Biosimilar - Research Grade \(ICH5001\)](#), [Toripalimab Biosimilar - Research Grade \(ICH5002\)](#), [Camrelizumab Biosimilar - Research Grade \(ICH5003\)](#), [Tislelizumab Biosimilar - Research Grade \(ICH5004\)](#), [Penpulimab Biosimilar - Research Grade \(ICH5112\)](#), [Cemiplimab Biosimilar - Research Grade \(ICH5161\)](#), [Peresolimab Biosimilar - Research Grade \(ICH5221\)](#), [Acrixolimab Biosimilar - Research Grade \(ICH5224\)](#), [Adebrelimab Biosimilar - Research Grade \(ICH5225\)](#), [Enlonstobart Biosimilar - Research Grade \(ICH5234\)](#), [Ezabenlimab Biosimilar - Research Grade \(ICH5238\)](#), [Finotonlimab Biosimilar - Research Grade \(ICH5241\)](#), [Geptanolimab Biosimilar - Research Grade \(ICH5243\)](#), [Iparomlimab Biosimilar - Research Grade \(ICH5248\)](#), [Nofazinlimab Biosimilar - Research Grade \(ICH5262\)](#), [Pimivalimab Biosimilar - Research Grade \(ICH5266\)](#), [Pradusinstobart Biosimilar - Research Grade \(ICH5268\)](#), [Pucotenlimab Biosimilar - Research Grade \(ICH5269\)](#), [Sugemalimab Biosimilar - Research Grade \(ICH5278\)](#), [Zimberelimab Biosimilar - Research Grade \(ICH5292\)](#), [Retifanlimab Biosimilar - Research Grade \(ICH5296\)](#), [Dostarlimab Biosimilar - Research Grade \(ICH5311\)](#), [Balstilimab Biosimilar - Research Grade](#)

[\(ICH5369\)](#), [Budigalimab Biosimilar - Research Grade \(ICH5417\)](#), [Cetrelimab Biosimilar - Research Grade \(ICH5434\)](#), [Gilvetmab Biosimilar - Research Grade \(ICH5572\)](#), [Lodapolimab Biosimilar - Research Grade \(ICH5651\)](#), [Pidilizumab Biosimilar - Research Grade \(ICH5773\)](#), [Prolgolimab Biosimilar - Research Grade \(ICH5791\)](#), [Rosnilimab Biosimilar - Research Grade \(ICH5837\)](#), [Rulonilimab Biosimilar - Research Grade \(ICH5840\)](#), [Sasanlimab Biosimilar - Research Grade \(ICH5848\)](#), [Serplulimab Biosimilar - Research Grade \(ICH5855\)](#), [Spartalizumab Biosimilar - Research Grade \(ICH5881\)](#), [Zeluvalimab Biosimilar - Research Grade \(ICH6006\)](#)

Sequence: <https://www.imgt.org/mAb-DB/>

Buffer: ICH3002

UniProt: Q15116

Shipping Conditions: Blue ice

background: This product is an unconjugated, non-therapeutic recombinant analog of the anti-PD-1 antibody lipustobart, supplied for research use only. It is a human IgG4-kappa immunoglobulin engineered around the programmed cell death protein 1 (PD-1, PDCD1, CD279) target and is not the clinical drug, nor is it intended for any human or veterinary use. As a research-grade biosimilar, it is useful for investigators studying PD-1 biology and immune-checkpoint pharmacology who need a well-defined, reproducible binding reagent rather than a therapeutic. Typical applications include use as a positive or isotype-matched reference control in binding and blocking assays, as a benchmark molecule in comparability and characterization studies, and as a tool for in-vitro and preclinical mechanistic work. It is offered at low endotoxin levels (research grade 1 EU/mg; ultra-low 0.5 EU/mg) and in bulk milligram-to-gram quantities to support assay development, screening campaigns, and scale-dependent workflows. The IgG4 backbone is relevant because that isotype minimizes effector engagement, which matters when interpreting checkpoint-blockade readouts. It provides a consistent, characterized standard for laboratories comparing candidate anti-PD-1 molecules. PD-1 (programmed cell death protein 1; gene PDCD1; CD279; UniProt Q15116) is a ~288-amino-acid type I transmembrane inhibitory receptor of the immunoglobulin superfamily, expressed on activated T cells, B cells, natural killer cells, and myeloid subsets. Its single IgV-like extracellular domain binds the ligands PD-L1 (CD274) and PD-L2 (CD273). Ligand engagement clusters PD-1 at the immunological synapse and drives phosphorylation of its cytoplasmic ITIM and ITSM motifs, recruiting the phosphatase SHP-2, which dephosphorylates TCR and CD28 signaling components. The net effect is dampened T-cell

activation, reduced proliferation and cytokine output, and promotion of peripheral tolerance and T-cell exhaustion. Tumors and chronic infections exploit this axis to evade immunity, which is why PD-1/PD-L1 blockade is a central strategy in cancer immunotherapy research.

Other names: Protein PD-1, hPD-1, Programmed cell death protein 1, PDCD1

Specificity: Detects human PD-1

Purification Method: This monoclonal antibody was purified using Protein A

Formulation: Sterile, preservative-free, solution in PBS. BSA and Azide free.

Purity: >95% by SDS-PAGE

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

Storage: This biosimilar is stable when stored at 2-8°C. For longer term storage (> 3 months) it is recommended to store this antibody at -20°C or -70°C.

Applications: Functional Assays

Application Notes: This biosimilar is for research use only (RUO): it is not for diagnostic or therapeutic procedures and cannot be purchased by patients.

Use: Products are for research use only. Not for use in diagnostic or therapeutic procedures.

Delivery Time: 4 weeks