

# Anti-PD1 hIgG4 Reference Antibody (Pembio)

## Product Information

<b>Product Name</b>	Anti-PD1 hIgG4 Reference Antibody (Pembio)
<b>Storage temp.</b>	Store at 2-8°C short term (1-2 weeks).Store at $\leq -20^{\circ}\text{C}$ long term. Avoid repeated freeze-thaw.
<b>Catalog# / Size</b>	<b>GM-87802MAB -1mg / 1 mg</b> <b>GM-87802MAB-5mg / 5 mg</b> <b>GM-87802MAB-25mg / 25 mg</b> <b>GM-87802MAB-50mg / 50 mg</b> <b>GM-87802MAB-100mg / 100 mg</b>

## Antibody Information

<b>Expression System</b>	CHO
<b>Aggregation</b>	< 5% as determined by SEC-HPLC
<b>Purity</b>	> 95% as determined by SDS-PAGE
<b>Endotoxin</b>	< 1 EU/mg, determined by LAL gel clotting assay
<b>Sterility</b>	0.2 $\mu\text{m}$ Filtered
<b>Target</b>	PD1
<b>Clone</b>	Pembrolizumab
<b>Alternative Names</b>	CD279, PD-1, PDCD1, SLEB2, hPD-1, hPD-I, hSLE1
<b>Source/Isotype</b>	Monoclonal human IgG4 S228P, kappa
<b>Application</b>	/
<b>Description</b>	The programmed cell death 1 protein (PD-1, PDCD1, CD279) is a member of the CD28 family of immunoreceptors that regulate T cell activation and immune responses. The PD-1 protein contains an extracellular Ig V domain, a transmembrane domain, and a cytoplasmic tail that includes an immunoreceptor tyrosine-based inhibitory motif (ITIM) and an immunoreceptor tyrosine-based switch motif (ITSM). PD-1 is activated by the cell surface ligands PD-L1 and PD-L2. Upon activation, PD-1 ITIM and ITSM phosphorylation leads to the recruitment of the protein tyrosine phosphatases SHP-1 and SHP-2, which suppress TCR signaling. In addition to activated T-cells, PD-1 is expressed in activated B-cells and monocytes, although its function in these cell types has not been fully characterized. The PD-1 pathway plays an important role in immune tolerance; however, research studies show that cancer cells often adopt this pathway to escape immune surveillance. Consequently, blockade of

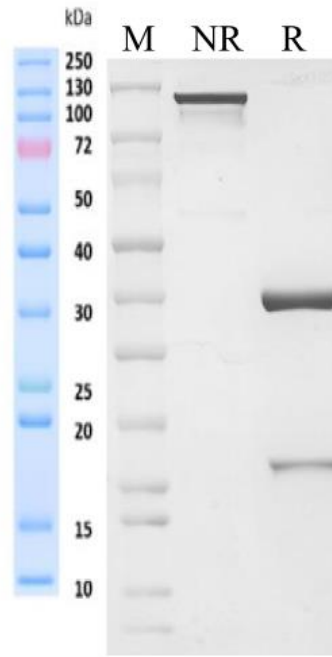
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PD-1 and its ligands is proving to be a sound strategy for neoplastic intervention.

**Formulation** phosphate-buffered solution, pH 7.4.

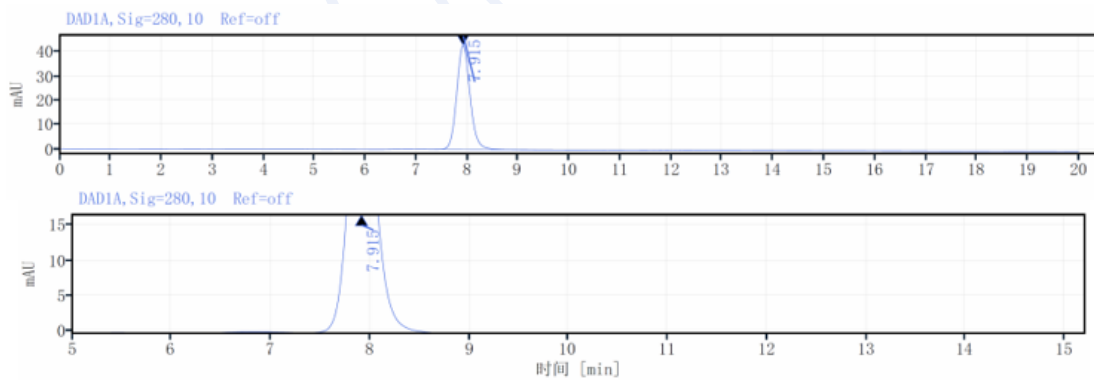
## Data Examples

### SDS-PAGE



On SDS-PAGE under reducing (R)/non-reducing(N-R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

### SEC-HPLC



The purity of this product is more than 95% verified by SEC-HPLC