

Human CD28 Protein; His Tag

Product Information

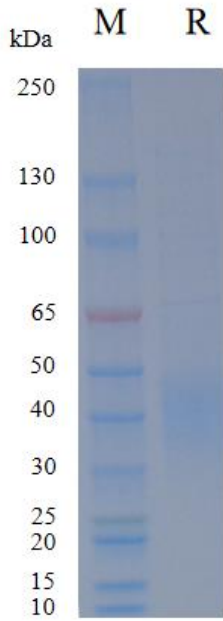
Product Name	Human CD28 Protein; His Tag
Storage temp	Store at $\leq -70^{\circ}\text{C}$, stable for 6 months after receipt. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.
Catalog# / Size	GM-88470RP-100 / 100 μg GM-88470RP-1000 / 1 mg

Protein Information

Alternative Names	CD28, Tp44
Source	Human CD28 Protein; His Tag (GM-88470RP) is expressed from human 293 cells (HEK-293). It contains AA Asn 19 - Pro 152 (Accession # P10747-1). This protein carries a His tag at the C-terminus.
Purity	> 90% as determined by SDS-PAGE
Endotoxin	< 1 EU/ μg , determined by LAL gel clotting assay
Predicted Mol Mass	16.0 KDa
Formulation	Supplied as a 0.2 μm filtered solution of PBS, pH7.2-7.4.
Description	<p>CD28 (also known as Tp44) is a critical costimulatory receptor expressed primarily on the surface of T cells. It plays an essential role in T cell activation, survival, and differentiation. Upon binding to its ligands CD80 (B7-1) and CD86 (B7-2) on antigen-presenting cells, CD28 delivers a “second signal” that complements T cell receptor (TCR) engagement. This costimulatory signal enhances IL-2 production, promotes T cell proliferation, and supports the development of effective adaptive immune responses.</p> <p>Beyond its role in initial T cell activation, CD28 is involved in maintaining T cell homeostasis and long-term immune memory. It contributes to cytokine production, metabolic fitness, and resistance to apoptosis in T cells. In the context of tumor immunity, autoimmunity, and chronic infection, modulation of the CD28 pathway has important implications for immunotherapy and immune regulation. Recombinant Human CD28 Protein with a His tag is widely used in studies of T cell costimulation, signal transduction, and in the development or functional evaluation of immunotherapeutic agents, including checkpoint modulators and engineered T cell therapies.</p>

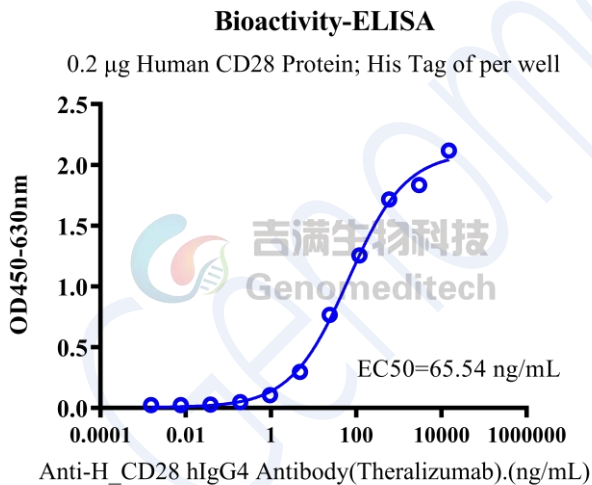
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SDS-PAGE

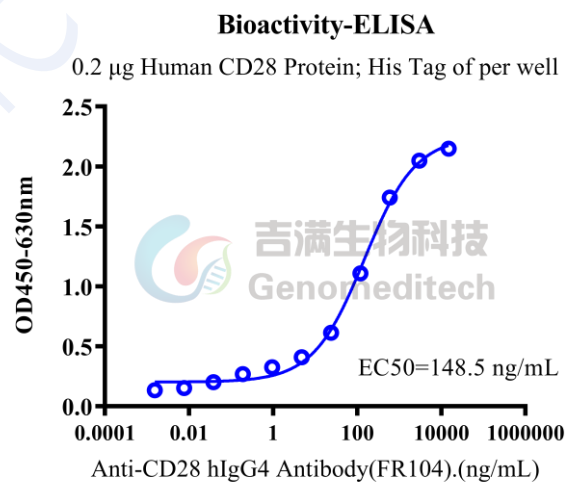


On SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 90%.

Bioactivity-ELISA



Human CD28 Protein; His Tag (Catalog # GM-88470RP) was immobilized at 2 $\mu\text{g}/\text{ml}$ (100 $\mu\text{L}/\text{well}$). Increasing concentrations of Anti-H_CD28 hIgG4 Antibody (Theralizumab) (Catalog # GM-27197AB) were added.



Human CD28 Protein; His Tag (Catalog # GM-88470RP) was immobilized at 2 $\mu\text{g}/\text{ml}$ (100 $\mu\text{L}/\text{well}$). Increasing concentrations of Anti-CD28 hIgG4 Antibody (FR104) (Catalog # GM-52277AB) were added.