

Human CD80 Protein; His Tag

Product Information

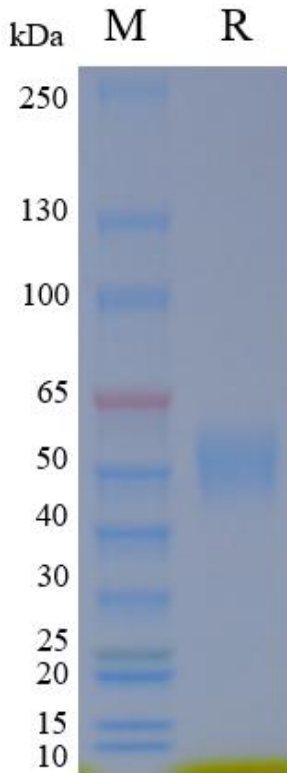
Product Name	Human CD80 Protein; His Tag
Storage temp	Store at $\leq -70^{\circ}\text{C}$, stable for 6 months after receipt. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.
Catalog# / Size	GM-88612RP-100 / 100 μg GM-88612RP-1000 / 1 mg

Protein Information

Alternative Names	B7-1, B7.1, BB1, CD28LG, CD28LG1, LAB7
Source	Human CD80 Protein; His Tag (GM-88612RP) is expressed from human 293 cells (HEK-293). It contains AA Val 35 - Asn 242 (Accession # P33681-1). 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	24.7 kDa
Formulation	Supplied as a 0.2 μm filtered solution of PBS, pH7.2-7.4.
Description	CD80 protein, also known as B7-1, is a co-stimulatory molecule that belongs to the B7 family of the immunoglobulin superfamily. It is encoded by the <i>CD80</i> gene and is a protein associated with the human immune system. CD80 protein was initially discovered on activated B cells and antigen-presenting cells, and later detected in various immune cell subsets, including dendritic cells, macrophages, and activated T cells, as well as in some non-immune tissues and tumor cells. CD80 protein regulates the activation, proliferation, and differentiation of T cells by binding to its ligands CD28 and CTLA-4 (CD152) on the surface of T cells. CD4+ and CD8+ T cells are important types of lymphocytes with critical functions in adaptive immune responses, cytokine production, and immune memory formation, making them central members of the immune system. Research indicates that CD80 protein plays a significant role in promoting T cell activation and survival, enhancing immune responses, and modulating immune tolerance. Additionally, the expression of CD80 protein is associated with autoimmune diseases, transplant rejection, tumor immunity, and infectious diseases, making it a potential target for immunotherapy.

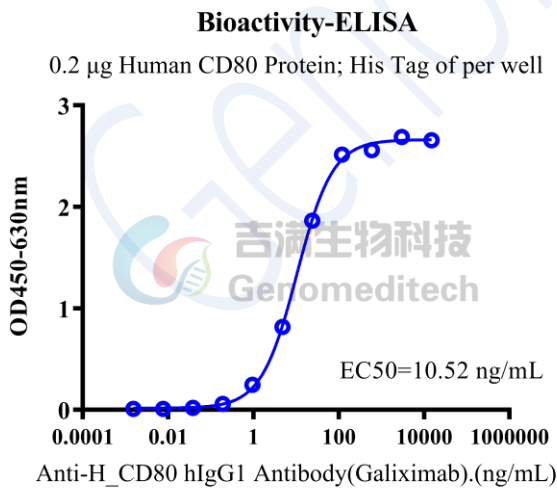
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SDS-PAGE



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 CD80 Protein; His Tag (Catalog # GM-88612RP) was immobilized at 2 µg/ml (100 µL/well). Increasing concentrations of Anti-H_CD80 hIgG1 Antibody(Galiximab) (Catalog # GM-46075AB) were added.