

# Human CD40 Protein; His Tag

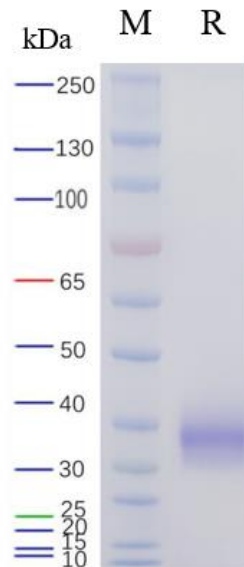
## Product Information

Product Name	Human CD40 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-87238RP-100 / 100 $\mu\text{g}$ GM-87238RP-1000 / 1 mg

## Protein Information

Alternative Names	CD40,Bp50,CDW40,MGC9013,TNFRSF5,p50
Source	Human CD40 Protein; His Tag (GM-87238RP) is expressed from human 293 cells (HEK-293). It contains AA Glu21 - Arg193 (Accession # P25942-1). This protein carries a His tag at the C-terminus.
Purity	> 95% as determined by SDS-PAGE
Endotoxin	< 1 EU/ $\mu\text{g}$ , determined by LAL gel clotting assay
Predicted Mol Mass	19.8 KDa
Formulation	Supplied as a 0.2 $\mu\text{m}$ filtered solution of PBS, pH7.4.
Description	<p>CD40 protein is a receptor protein on the cell membrane, which belongs to the tumor necrosis factor receptor superfamily. CD40 protein is mainly expressed on the surfaces of various cells in the immune system, including B cells, macrophages, dendritic cells, and endothelial cells. The ligand for CD40 protein is CD40 ligand (CD40L), also known as CD154, which is mainly expressed on T cells, activated macrophages, and dendritic cells.</p> <p>Upon binding with CD40 ligand, CD40 protein activates multiple signaling pathways, including NF-<math>\kappa\text{B}</math>, MAPK, and PI3K pathways. The activation of these signaling pathways promotes cell proliferation, differentiation, and survival, while also regulating the function of immune cells. Activation of CD40 protein can also promote the maturation and antigen-presenting ability of antigen-presenting cells, thereby enhancing cell-mediated immune responses. In immunotherapy and vaccine research, utilizing the activation of CD40 protein can enhance the cytotoxic effects of immune cells on tumor cells, thereby improving the efficacy of immunotherapy. Therefore, CD40 protein is of significant importance in immunology and clinical research.</p>

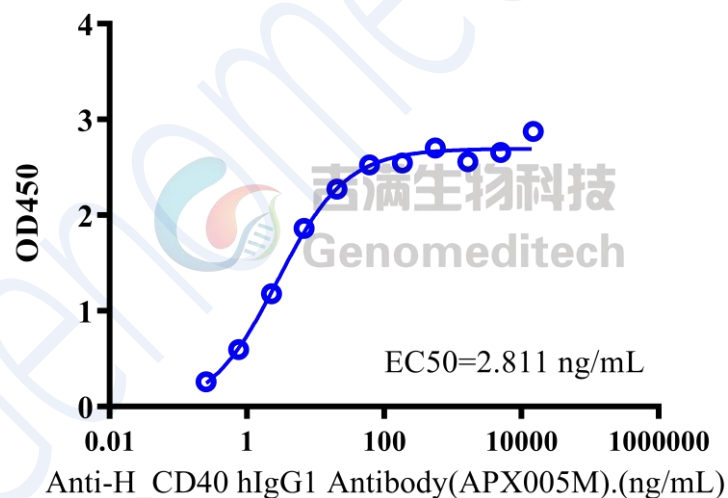
## SDS-PAGE



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

## Bioactivity-ELISA

### Human CD40 Protein; His Tag, ELISA 0.1 µg Human CD40 Protein; His Tag of per well



Human CD40 Protein; His Tag (Catalog # GM-87238RP) was immobilized at 1 µg/ml (100 µL/well). Increasing concentrations of Anti-H\_CD40 hIgG1 Antibody (APX005M) (Catalog # GM-24025AB) were added.