

Human CD2 Protein; His Tag

Product Information

Product Name	Human CD2 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.

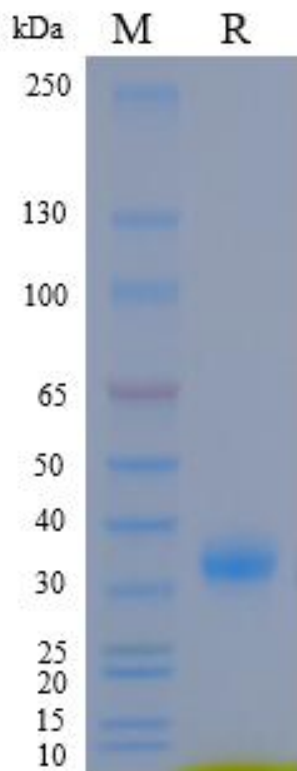
Catalog# / Size	GM-88687RP-100 / 100 μg GM-88687RP-1000 / 1 mg
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Protein Information

Alternative Names	SRBC, LFA-2, T11
Source	Human CD2 Protein; His Tag (GM-88687RP) is expressed from human 293 cells (HEK-293). It contains AA Lys 25 - Asp 209 (Accession # AAH33583). This protein carries a His tag at the C-terminus.
Purity	> 95% as determined by SDS-PAGE
Endotoxin	< 1 EU/ μg , determined by LAL gel clotting assay
Predicted Mol Mass	22.1 kDa
Formulation	Supplied as a 0.2 μm filtered solution of PBS, pH7.2-7.4.
Description	CD2 protein, full name Cluster of Differentiation 2 (also known as T-cell surface antigen T11/Leu-5), is an important cell surface glycoprotein and a member of the immunoglobulin superfamily. CD2 protein plays a crucial role in regulating T-cell activation, adhesion, and signaling by serving as a costimulatory receptor that binds to its ligand CD58 (LFA-3) on antigen-presenting cells, thereby facilitating T-cell-antigen-presenting cell interactions and promoting effective immune responses in normal physiological conditions. Currently, several therapeutic strategies targeting CD2 have been developed or are under investigation, including monoclonal antibodies such as Alefacept (an LFA-3/IgG1 fusion protein that blocks CD2-mediated T-cell activation), which has been clinically used for the treatment of moderate-to-severe plaque psoriasis. Other anti-CD2 antibodies and bispecific T-cell engagers are being explored for their potential in T-cell malignancies and in modulating immune responses in autoimmune conditions. In summary, CD2 protein plays a pivotal role in T-cell-mediated immunity and immune regulation, and is of great significance for understanding the molecular mechanisms of immune activation, developing targeted immunomodulatory therapies, and evaluating disease progression in both autoimmune and malignant settings.

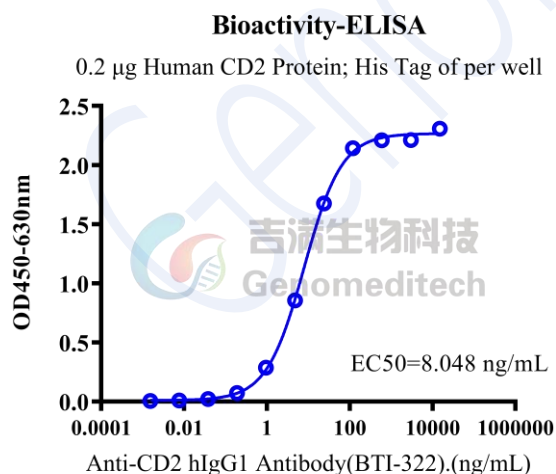
Version:4.0

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 CD2 Protein; His Tag (Catalog # GM-88687RP) was immobilized at 2 μ g/ml (100 μ L/well). Increasing concentrations of Anti-CD2 hIgG1 Antibody (BTI-322) (Catalog # GM-79929AB) were added.