

CD58 Protein, Human, Recombinant (hFc)

General Information

Synonyms:	CD58;ag3;LFA-3;LFA3;CD58 molecule
Protein Construction:	Phe29-Arg215
Species:	Human
Expression Host:	HEK293 Cells
Accession:	AAH05930
Molecular Weight:	48.1 kDa (predicted); 65-75 kDa (reducing conditions)

QC Testing

Biological Activity:	Immobilized Human CD2, His Tag at 2 µg/ml (100 µl/well) on the plate. Dose response curve for Human CD58, hFc Tag with the EC50 of 0.32 µg/ml determined by ELISA (QC Test). Human CD2, His Tag captured on CM5 Chip via anti-his antibody can bind Human CD58, hFc Tag with an affinity constant of 15.48 nM as determined in SPR assay (Biacore T200).
Purity:	> 95 % as determined by SDS-PAGE
Endotoxin:	< 1.0 EU/µg of the protein as determined by the LAL method.
Formulation:	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.

Preparation and Storage

Reconstitution:

Reconstitute the lyophilized protein in distilled water. The product concentration should not be less than 100 µg/ml. Before opening, centrifuge the tube to collect powder at the bottom. After adding the reconstitution buffer, avoid vortexing or pipetting for mixing.

Stability & Storage:

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein Background

CD53 is a member of the transmembrane 4 superfamily, also called the tetraspanin family. Most of these members are cell-surface proteins that are characterized by the presence of four hydrophobic domains. These proteins mediate signal transduction events that play a role in the regulation of cell development, activation, growth and

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motility. CD53 is a cell surface glycoprotein that is known to complex with integrins. Familial deficiency of CD53 gene has been linked to an immunodeficiency associated with recurrent infectious diseases caused by bacteria, fungi and viruses. CD53 contributes to the transduction of CD2-generated signals in T cells and natural killer cells and has been suggested to play a role in growth regulation. Cancer Immunotherapy Immune Checkpoint Immunotherapy Targeted Therapy

Reference

Rochelle JM. et al., 1993, Int Immunol. 5 (2): 209-16.

Virtaneva KI. et al., 1993, Immunogenetics. 37 (6): 461-5.

Horejsí V. et al., 1991, FEBS Lett. 288 (1-2): 1-4.

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