Data Sheet (Cat.No.TMPY-03953)

TargetMol

CD58 Protein, Cynomolgus, Recombinant (His)

General Information

Synonyms: CD58;LFA3;CD58 molecule

Protein Construction: A DNA sequence encoding the cynomolgus CD58 (F7HQR6) (Met1-Arg215) was expressed with a polyhistidine tag at the C-terminus. Predicted N terminal: Ile 29

Species: Cynomolgus

Expression Host: HEK293 Cells

Accession: F7HQR6

Molecular Weight: 23 kDa (predicted); 38-42 kDa (reducing conditions)

QC Testing

Biological Activity: Measured by its binding ability in a functional ELISA. Immobilized Cynomolgus CD58-His at 10 μg/ml (100 μl/well) can bind Cynomolgus CD2-Fc , The EC50 of Cynomolgus CD2-Fc is 0.06-0.14 μg/ml.

Purity: > 95 % as determined by SDS-PAGE

Endotoxin: < 1.0 EU/μg of the protein as determined by the LAL method.

Formulation: Lyophilized from a solution filtered through a 0.22 μm filter, containing PBS, pH 7.4. Typically, a mixture containing 5% to 8% trehalose, mannitol, and 0.01% Tween 80 is incorporated as a protective agent before lyophilization.

Preparation and Storage

Reconstitution:

A Certificate of Analysis (CoA) containing reconstitution instructions is included with the products. Please refer to the CoA for detailed information.

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 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 ImmunotherapyImmune CheckpointImmunotherapyTargeted 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.