Data Sheet (Cat.No.TMPY-02616)

TargetMol

CD55/DAF Protein, Mouse, Recombinant (His)

General Information

Synonyms:	GPI-DAF;Daf-GPI;Daf;Daf1;CD55 molecule, decay accelerating factor for complement (Cromer blood group)
Protein Construction:	Asp35-Gly362
Species:	Mouse
Expression Host:	HEK293 Cells
Accession:	Q61475
Molecular Weight:	36.6 kDa (Predicted); 50-70 kDa (Due to glycosylation)

QC Testing

Biological Activity:	Activity testing is not tested. It is theoretically active, but we cannot guarantee it.
Purity:	> 95% as determined by Tris-Bis PAGE; > 95% as determined by HPLC
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

Decay Accelerating Factor (or CD55) is a major regulator of the alternative and classical pathways of complement activation and is expressed on all serum-exposed cells. It is commonly hijacked by invading pathogens, including many enteroviruses and uropathogenic Escherichia coli, to promote cellular attachment prior to infection.

Reference

Lea S. (2002) Interactions of CD55 with non-complement ligands. Biochem Soc Trans. 30(Pt 6): 1014-9.
Mikesch JH,et al.(2006) The expression and action of decay-accelerating factor (CD55) in human malignancies and cancer therapy. Cell Oncol. 28(5-6): 223-32.
Wang Y,et al.(2010) Decay accelerating factor (CD55) protects neuronal cells from chemical hypoxia-induced injury. J Neuroinflammation. 7:24.