Data Sheet (Cat.No.TMPY-04707)

TargetMol
YOUR TARGET MOLECULES

Ficolin 1/FCN1 Protein, Rhesus, Recombinant (hFc)

General Information

Synonyms: ficolin 1;FCNA;FCN1

Protein Construction: The rhesus FCN1 (XP_001098002.1) (Met1-Ala326) was expressed with the Fc region of Human IgG1 at the C-terminus.

Species: Rhesus

Expression Host: HEK293 Cells

Accession: XP_001098002.1

Molecular Weight: 59.1 kDa (predicted)

QC Testing

Biological Activity: Testing in progress

Purity: > 90 % 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 proteinsolutions, 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.

Shipping:

In general, Lyophilized powders are shipping with blue ice.

Protein Background

Ficolins are humoral molecules of the innate immune systems which recognize carbohydrate molecules on pathogens, apoptotic and necrotic cells. The Ficolin family of proteins are characterized by the presence of a leader peptide, a short N-terminal segment, followed by a collagen-like region, and a C-terminal fibrinogen-like domain. Ficolins are humoral molecules of the innate immune systems which recognize carbohydrate molecules on pathogens, apoptotic and necrotic cells. Three Ficolins have been identified in humans: L-Ficolin, H-Ficolin and M-Ficolin (also referred to as Ficolin-2, -3 and -1, respectively). They are soluble oligomeric defence proteins with

lectin-like activity and they are structurally similar to the human collectins, mannan-binding lectin (MBL) and surfactant protein A and D. Dysfunction or abnormal expressions of Ficolins may involved in the pathogenesis of human diseases including infectious and inflammatory diseases, autoimmune disease and clinical syndrome of preeclampsia. They are soluble oligomeric defence proteins with lectin-like activity and they are structurally similar to the human collectins, mannan-binding lectin (MBL) and surfactant protein A and D. Upon recognition of the infectious agent, the Ficolins act through two distinct routes: initiate the lectin pathway of complement activation through attached serine proteases (MASPs), and a primitive opsonophagocytosis thus limiting the infection and concurrently orchestrating the subsequent adaptive clonal immune response. Ficolin-1 (FCN1) is predominantly expressed in the peripheral blood leukocytes.

Reference

Thiel S. (2007) Complement activating soluble pattern recognition molecules with collagen-like regions, mannan-binding lectin, ficolins and associated proteins. Mol Immunol. 44(16): 3875-88.