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# Recombinant Human Ficolin-1/Ficolin-A/FCN1 Protein (His Tag)

Catalog No. PKSH031350

Note: Centrifuge before opening to ensure complete recovery of vial contents.

### **Description**

Synonyms FCN1;FCNA;FCNM

**Species** Human

Expression Host HEK293 Cells
Sequence Met 1-Ala 326
Accession NP\_001994.2
Calculated Molecular Weight 33.6 kDa
Observed molecular weight 33.6 kDa
Tag C-His

**Bioactivity** Measured by its binding ability in a functional ELISA. 1. Immobilized FCN1 at 10

μg/ml can bind biotinylated recombinant human Fetuin-A with a linear range of 16-2000 ng/ml. 2. Immobilized FCN1 at 10 μg/ml can bind biotinylated recombinant mouse Fetuin-A with a linear range of 16-2000 ng/ml.

#### **Properties**

**Purity** > 95 % as determined by reducing SDS-PAGE.

**Endotoxin** < 1.0 EU per µg of the protein as determined by the LAL method.

**Storage** Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to

-80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots

of reconstituted samples are stable at < -20°C for 3 months.

**Shipping** This product is provided as lyophilized powder which is shipped with ice packs.

**Formulation** Lyophilized from sterile PBS, pH 7.4

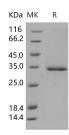
Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as

protectants before lyophilization.

Please refer to the specific buffer information in the printed manual.

**Reconstitution** Please refer to the printed manual for detailed information.

#### Data



> 95 % as determined by reducing SDS-PAGE.

#### For Research Use Only

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# **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.

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