## 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 $\mu$ g/ml can bind biotinylated recombinant human Fetuin-A with a linear range of 16-2000 ng/ml. 2. Immobilized FCN1 at 10 $\mu$ g/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 $\mu$ g 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.
Dete	

Data

KDa	MK	R
116 66.2	-	
45.0 35.0	-	_
25.0	-	
18.4 14.4	-	

> 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, mannan-binding lectin (MBL) and surfactant protein (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.