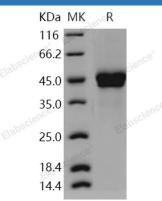
Recombinant Human PTX3/Pentraxin 3/TSG-14 Protein (His Tag)

Catalog Number: PKSH030911

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

Description	
Species	Human
Source	HEK293 Cells-derived Human PTX3/Pentraxin 3/TSG-14 protein Met 1-Ser 381, with an
	C-terminal His
Calculated MW	41.6 kDa
Observed MW	43-47 kDa
Accession	NP_002843.2
Bio-activity	Not validated for activity
Properties	
Purity	> 97 % 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 $< -20^{\circ}$ 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% Tween 80 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



> 97 % as determined by reducing SDS-PAGE.

Background

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Pentraxin-related protein PTX3, also known as Tumor necrosis factor alpha-induced protein 5, Tumor necrosis factorinducible gene 14 protein, TSG-14, PTX3 and TNFAIP5, is a secreted protein which contains onepentaxin domain. PTX3 plays a role in the regulation of innate resistance to pathogens, inflammatory reactions, possibly clearance of selfcomponents and female fertility. Pentraxins are a family of evolutionarily conserved multifunctional pattern-recognition proteins characterized by a cyclic multimeric structure. Based on the primary structure of the subunit, the pentraxins are divided into two groups: short pentraxins and long pentraxins. C-reactive protein (CRP) and serum amyloid Pcomponent (SAP) are the two short pentraxins. The prototype protein of the long pentraxin group is pentraxin 3 (PTX3). CRP and SAP are produced primarily in the liver in response to IL-6, while PTX3 is produced by a variety of tissues and cells and in particular by innate immunity cells in response to proinflammatory signals and Toll-like receptor (TLR) engagement. PTX3 is essential in female fertility by acting as a nodal point for the assembly of the cumulus oophorus hyaluronan-rich extracellular matrix PTX3 interacts with several ligands, including growth factors, extracellular matrix components and selected pathogens, playing a role in complement activation and facilitating pathogen recognition by phagocytes, acting as a predecessor of antibodies. PTX3 may also contribute to the pathogenesis of atherosclerosis.