

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

Catalog No. PKSH030911

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

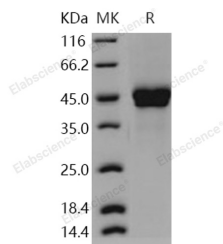
Description

Synonyms	PTX3;TNFAIP5;TSG-14
Species	Human
Expression Host	HEK293 Cells
Sequence	Met 1-Ser 381
Accession	NP_002843.2
Calculated Molecular Weight	41.6 kDa
Observed molecular weight	43-47 kDa
Tag	C-His
Bioactivity	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°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



> 97 % as determined by reducing SDS-PAGE.

Background

Pentraxin-related protein PTX3, also known as Tumor necrosis factor alpha-induced protein 5, Tumor necrosis factor-inducible gene 14 protein, TSG-14, PTX3 and TNFAIP5, is a secreted protein which contains onepentaxin domain. PTX3

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plays a role in the regulation of innate resistance to pathogens, inflammatory reactions, possibly clearance of self-components 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 P-component (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.