

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

RPES8387



## Product Information

<b>Product SKU:</b> RPES8387	<b>Expression Host:</b> Mammalian	<b>Size:</b> 20µg
<b>Tag:</b> C-His	<b>Reactivity:</b> Human	<b>Accession:</b> P26022

## Additional Information

<b>Calculated MW:</b> 39.9 kDa	<b>Observed MW:</b> 45 kDa
<b>Sequence:</b> Glu18-Ser381	

## Protein Information

**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 that contains one pentaxin domain. PTX3 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.

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<b>Synonyms:</b>	PTX, Pentraxin, TNFAIP, PTX3/TSG, TSG, PTX3, TNFAIP5, TSG-14, long, Pentraxin 3, PTX3/TSG-14, TNF-inducible gene 14 protein, TSG14, AI607804, long, TNF-inducible gene 14 protein, Pentaxin 3, Pentaxin-related protein PTX3, Pentraxin 3 long, Pentraxin-related gene, Pentraxin-related gene rapidly induced by IL-1 beta, Pentraxin-related protein PTX3, TNF alpha-induced protein 5, TSG-14, Pentraxin 3, Tumor necrosis factor alpha-induced protein 5, Tumor necrosis factor-inducible gene 14 protein, Tumor necrosis factor-inducible protein TSG-14
<b>Endotoxin:</b>	< 1.0 EU/mg of the protein as determined by the LAL method
<b>Formulation:</b>	Lyophilized from a 0.2 µm filtered solution in PBS with 5% Trehalose and 5% Mannitol.
<b>Purity:</b>	> 90% as determined by reducing SDS-PAGE.
<b>Bio-Activity:</b>	Not validated for activity
<b>Storage:</b>	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.