

Product Specification Sheet

Recombinant Pentraxin 3 (PTX3/TSG14) Protein

Cat. # PTX36-R-5	Recombinant purified Human PTX3 protein	SIZE: 5 ug
Cat. # PTX36-R-25	Recombinant purified Human PTX3 protein	SIZE: 25 ug

Pentraxins are a family of proteins emerging from genes that are conserved in their carboxy-terminal halves a pentraxin domain and are prototypical acute phase proteins with acquired novel amino-terminal domains. Pentraxins, include C reactive protein (CRP) and Serum Amyloid P component (SAP), which serve as indicators of inflammatory reactions as a result of the exposure of liver cells to cytokines, mainly interleukin-6 (IL-6).

PTX3 or TSG14 or long pentraxin (human mature chain 364 aa, chromosome 3q25; ~43 kda) is structurally related but different form classic pentraxins. PTX3 was clones as an IL-1 inducible gene in endothelial cells, and as TNF-inducible gene in fibroblasts called TSG14. The C-terminal half of PTX3 aligns with CRP and SAP, but the N-terminal half is unique. PTX3 is induced by LPS, IL-1 and TNF-alpha, but not IL-6. During an acute phase response induced by LPS, PTX3 is expressed in many organs (heart, skeletal muscle). PTX3 expression may be indicative of its role in cardiovascular and inflammatory pathology.

Source of Antigen

Human PTX3/TSG14 protein (1-381 aa), containing his-tag at the C-terminus, was expressed in mouse myeloma cell line NSO and purified >90%. Purified protein is ~41 kda (size on SDS-PAGE, reducing ~45 kda due to glycosylation). It is supplied in 20 mM MOPS, 0.3 M NaCl and 5 mM CaCl₂, pH 7.0 and 0.1% BSA in lyophilized form (5, and 25 ug size) or liquid form (5 ug/50 ul). This preparation is not necessarily sterile. It can sterile filtered if necessary. **Lyophilized protein** should be reconstituted in PBS containing 0.1% BSA or HAS at no less than 5 ug/50 ul.

Endotoxin level in recombinant Human PTX3 (cat **PTX36-R-5, -25**) is <1 EU/1 ug.

Biological activity of Human PTX3 was determined by its ability to bind C1q (human C1q at 5 ug/ml) in a functional ELISA.

General References: Andrea basile et al, (1997) JBC vol 272, No: 13, 8172-8178; Kamyar Zahedi et al (1997) JBC, Vol 272, No: 4, 2143-2148; Martino Introna et al (1996) Blood, Vol 87, No: 5 , 1868-1872; Giuseppe Peri et al (2000) Circulation, Vol 102, 636-641.

*This product is for In vitro research use only.

Storage

Short-term: unopened, undiluted liquid vials for less than a week at 4oC.

Long-term: at -20C or below in suitable aliquots after reconstitution. Do not freeze and thaw and store working, diluted solutions.

Stability: 6-12 months at -20oC or below.

Shipping: 4oC for solutions and room temp for powder.

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PTX36-R-5 -25

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