

Product Specification Sheet

**Recombinant Pentraxin (PTX3/TSG-14) Protein**

Cat. # PTX35-R-5	Recombinant purified Mouse PTX3 protein	<b>SIZE:</b> 5 ug
Cat. # PTX35-R-25	Recombinant purified Mouse PTX3 protein	<b>SIZE:</b> 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**

Mouse 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 reducing SDS-PAGE, ~45 kda due to glycosylation). It is supplied in 20 mM MOPS, 0.3 M NaCl and 5 mM CaCl<sub>2</sub>, 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 mouse PTX3 (cat **PTX35-R-5, -25**) is <1 EU/1 ug.

**Biological activity** of mouse 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.

**Some New Antibodies from ADI...**

PTX1-3 antibodies and proteins

CRP antibodies and ELISA kits

PTX35-R-5 -25                      71017A