

Product Specification Sheet

Pentraxin(PTX3/TSG-14) Antibodies

Cat. # PTX31-P	Mouse PTX3 control peptide # 1	SIZE: 100 ug
Cat. # PTX31-A	Rabbit Anti-Mouse PTX3 IgG # 1 (aff pure)	SIZE: 100 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 and Antibodies

Antigen	16-aa peptide from Mouse PTX3 (1); Designation (PTX31-P, control peptide) conjugated to KLH, epitope location ~ ~N-terminus
Ab Host/type	Rabbit, Polyclonal Aff pure IgG (cat # PTX31-A) purified over antigen-agarose column
2-ab	Goat Anti-rabbit IgG-HRP cat # 20320 (AP, biotin, FITC conjugates also available)

Form & Storage of Antibodies/Peptide Control

Affinity pure IgG
100 ug/100ul solution lyophilized powder
Supplied in **Buffer:** PBS+0.1% BSA
Reconstitute powder in PBS at 1mg/ml

Control/blocking peptide
100 ug/100 ul solution lyophilized powder
Supplied in **Buffer:** PBS pH 7.5,
Reconstitute powder in PBS at 1 mg/ml.

Storage
Short-term: unopened, undiluted liquid vials at -20OC and powder at 4oC or -20oC..

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.

Recommended Usage

Western Blotting (1-10 ug/ml for affinity pure antibody using ECL technique).

ELISA: Control peptide can be used to coat ELISA plates at 1 ug/ml and detected with antibodies (0.5-1 ug/ml for affinity pure).

Histochemistry & Immunofluorescence: Not tested. We recommend the use of aff pure IgG at 2-20 ug/ml.

Specificity & Cross-reactivity

The Mouse PTX31-P control peptide is 93% homologous to human, and 87% to bovine PTX3 or Tumor necrosis factor-inducible protein-14, TSG-14). Antibody cross-reactivity in various species has not been studied. Control peptide, because of its low mol. Wt (<3 kDa), is not suitable for Western. It should be used for ELISA or antibody blocking experiments (use 5-10 ug control peptide per 1 ug of aff pure IgG or 1 ul antiserum) to confirm antibody specificity (see detailed protocol at: [www.4adi.com\data/abblock.html](http://www.4adi.com/data/abblock.html)).

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 Inrona 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.

Some New Antibodies from ADI...

PTX1-3, NPXs, CRP, SAP antibodies
Recombinant purified Human and mouse PTX3 (TSG-14)

PTX31-A 71017A