ALPHA DIAGNOSTIC INTERNATIONAL

Product Specification Sheet

Mouse Pentraxin(PTX3/TSG-14) Antibodies

Cat. # PTX32-M	Rat monoclonal Anti-Mouse PTX3 protein IgG, aff pure	**SIZE**: 100 ug
Cat. # PTX32-C	**Recombinant purified** Mouse PTX3 protein control for WB	**SIZE**: 100 ul

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	**Recombinant purified** Mouse PTX3 protein
Ab Host/type	**Rat**, monoclonal Aff pure IgG (**cat # PTX32-M**) purified over Protein A/G - agarose column
2-ab	Goat Anti-**Rat** IgG-HRP conjugate Cat # 50320 (AP, biotin, FITC conjugates also available)
-ve control IgG	Cat # 20005-1, **Rat** (non-immune) Serum IgG, purified, suitable for ELISA, Western, IHC as –ve control

Mouse PTX3/TSG14 protein (381 aa), containing his-tag at the C-terminus, was expressed in mouse myeloma cell line NSO and purified >90%. Purified protein is ~45 kda due to glycosylation). For Western blot +ve control (**Cat # PTX32-C**) is supplied in SDS-PAGE sample buffer (reduced). Load 10 ul/lane of **PTX32**-C for good visibility with antibody Cat # **PTX32**-M. Store at –20oC in suitable size aliquots. SDS may crystallize in cold conditions. It should redissolve by warming before taking it from the stock. It should be heated once prior to loading on gels. If the product has been stored for several weeks, then it may be preferable to add 5 ul of fresh 2x sample buffer per 10 ul of the **PTX32**-C solution prior to heating and loading on gels. This preparation is not biologically active. It is not suitable for ELISA or other applications where native protein is required. Do not freeze, thaw, or heat repeatedly

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

Mouse PTX32-M reacts with mouse PTX3 and poorly with human PTX3. Antibody cross-reactivity in various species has not been studied.

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

*This product is for In vitro research use only.

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

PTX32-M-C 71213A

Alpha Diagnostic Intl Inc., 6203 Woodlake Center Dr, San Antonio, TX 78244, USA; **Email**: service@4adi.com
☎ (800) 786-5777; (210) 561-9515; **Fax**: (210) 561-9544; **Web Site**: www.4adi.com