



20150116ML

Anti-Mouse Pentraxin-3 (#6G73)

**FOR RESEARCH ONLY! NOT FOR HUMAN USE!**

Cat.-no.:	103-M452
Size:	100 µg
Lot. No.:	According to product label

Preparation: This antibody was produced from a hybridoma (mouse myeloma fused with spleen cells from a rat) immunized with mouse recombinant protein of Pentraxin-3.

Target Background

Synonyms (Target):	ptx3
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Pentraxin 3, also known as TSG14, was initially identified as a TNF α or IL1 β inducible gene. It belongs to the pentraxin family, which was named originally for the homo pentameric structure formed by its members. The pentraxin family is divided into two subfamilies: the “short” and the “long” pentraxins with approximate molecular weights of 25 kDa and 50 kDa, respectively. TSG14 is a member of the long pentraxin subfamily, which also includes the *Xenopus laevis* XLPXN1, the guinea pig apexin/p50, the rat neuronal pentraxin I (NPI) and NPR, the human neuronal pentraxin II (NPTX2) and the human neuronal activity-related pentraxin. Mature secreted PTX3 contains a pentaxinlike domain at its carboxyterminus that shares 23-28% amino acid (aa) sequence similarity to C-reactive protein (CRP) and serum amyloid P component (SAP), which belong to the short pentraxin subfamily. However, the N-terminal sequence of TSG 14 does not share aa sequence homology with any of the “short” pentraxins. Unlike CRP and SAP, which forms pentamers only, TSG14 forms both pentameric and higher ordered oligomers. Similar to CRP and SAP, TSG14 binds to the complement cascade component C1q. However, TSG14 does not bind to phosphoethanolamine, phosphocholine, or high pyruvate agarose, which are known ligands for CRP and SAP. While CRP and SAP are primarily produced in the liver, TSG14 expression is strongly upregulated by TNF α , IL1 β , and bacterial LPS in peripheral fibroblasts, endothelial cells, and macrophages. At the amino acid level, human and mouse TSG14 share 88% aa sequence homology. TSG14 concentration is elevated in the joint fluid of patients with rheumatoid arthritis (RA), indicating that TSG14 may be a potential mediator of immune response.

Database References Target

Protein RefSeq:	NP_033013.3
Uniprot ID:	P48759
mRNA RefSeq:	NM_008987.3

Product Specifications

Host	Rat
Reactivity against	Mouse
Clonality	Monoclonal Antibody
Clone	(#6G73)
Isotype	IgG2
Purification	Protein G chromatography
Antigen	recombinant mouse Pentraxin-3
Formulation	lyophilized
Reconstitution buffer	PBS (sterile)

Reconstitution: Reconstitute the antibody with 200 µl sterile PBS and the final concentration is 500 µg/ml.

Stability: Lyophilized samples are stable for 2 years from date of receipt when stored at -70°C. Reconstituted antibody can be aliquoted and stored frozen at < -20 °C for at least for six months without detectable loss of activity.

Remarks: This antibody detects specifically mouse Pentraxin-3 with WB

**AVOID REPEATED FREEZE AND THAW CYCLES!**

Applications

The antibody can be used within the following applications:

WB

Recommended usage:

WB: 1:100-500

NOTE: OPTIMAL DILUTIONS SHOULD BE DETERMINED BY EACH LABORATORY FOR EACH APPLICATION!