



20150217ML

Anti-Human Pentraxin-3 (#6B7)

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

Cat.-no.:	101-M605
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 mouse) immunized with recombinant human Pentraxin-3, also called TSG-14.

Target Background

Synonyms (Target):	PTX3; TSG-14; TNFAIP5
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Pentraxin 3 (PTX3), 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 homopentameric 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 TSG14 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 belongs to the short pentraxin subfamily. However, the Nterminal 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. Similarly 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. TSG14 is a marker of the acute phase response and is highly expressed in advanced atherosclerotic plaques. 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_002843.2
Uniprot ID:	P26022
mRNA RefSeq:	NM_002852.3

Product Specifications

Host	Mouse
Reactivity against	Human
Clonality	Monoclonal Antibody
Clone	(#6B7)
Isotype	IgG2
Purification	Protein G chromatography
Antigen	recombinant human 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 was selected for its ability to detect human Pentraxin-3.

**AVOID REPEATED FREEZE AND THAW CYCLES!**

Applications

The antibody can be used within the following applications:

WB

Recommended usage:

WB: Use at 1:500-1000

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



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