

Pentraxin 3/TSG-14 Polyclonal Antibody(Capture/Detector)

catalog number: AN000280P

Note: Centrifuge before opening to ensure complete recovery of vial contents.

Description

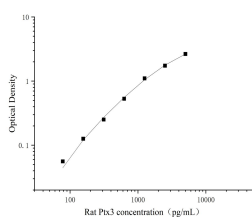
Reactivity	Rat
Immunogen	Recombinant Rat Pentraxin 3/TSG-14 protein expressed by E.coli
Host	Rabbit
Isotype	Rabbit IgG
Purification	Antigen Affinity Purification
Conjugation	Unconjugated
Buffer	Phosphate buffered solution, pH 7.2, containing 0.05% proclin 300.

Applications

Recommended Dilution

ELISA Capture	2-8 µg/mL
ELISA Detector	0.1-0.4 µg/mL

Data



Sandwich ELISA-Recombinant Rat Pentraxin 3/TSG-14 protein standard curve. Background subtracted standard curve using Pentraxin 3/TSG-14 antibody(AN000280P) (Capture), Pentraxin 3/TSG-14 antibody(AN000280P) (Detector) in sandwich ELISA. The reference range value for Recombinant Rat Pentraxin 3/TSG-14 protein is 6.86-5000 pg/mL.

Preparation & Storage

Storage	Store at 4°C valid for 12 months or -20°C valid for long term storage, avoid freeze / thaw cycles.
Shipping	The product is shipped with ice pack, upon receipt, store it immediately at the temperature recommended.

Background

For Research Use Only

Pentraxin 3 (PTX3), TSG-14, was initially identified as a TNF- α or IL-1 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. TSG-14 is a member of the long pentraxin subfamily, which also includes the *Xenopus laevis* XI-PXN1, 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 TSG-14 contains a pentraxin-like domain at its carboxy-terminus 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 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, TSG-14 forms both pentameric and higher ordered oligomers. Similarly to CRP and SAP, TSG-14 binds to the complement cascade component C1q. However, TSG-14 does not bind to phosphoethanolamine, phosphocholine, or high pyruvate agarose, which are known ligands for CRP and SAP. TSG-14 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, TSG-14 expression is strongly up regulated by TNF- α , IL-1 β , and bacterial LPS in peripheral fibroblasts, endothelial cells, and macrophages.