

Product datasheet for **AM26187PU-N**

Pentraxin 3 (PTX3) Rat Monoclonal Antibody [Clone ID: MNB4]

Product data:

Product Type:	Primary Antibodies
Clone Name:	MNB4
Applications:	ELISA, FC, IF, IHC, IP, WB
Recommended Dilution:	Immunohistochemistry on frozen sections. Immunohistochemistry on paraffin sections. Western blot. Typical starting working dilution is 1:50. Flow cytometry. Immunoassay. Immunofluorescence. Immunoprecipitation.
Reactivity:	Human
Host:	Rat
Isotype:	IgG2a
Clonality:	Monoclonal
Immunogen:	Human recombinant PTX3
Specificity:	This antibody recognizes human pentraxin 3 (PTX3), belonging to the long pentraxin family.
Formulation:	PBS State: Purified State: Liquid 0.2 µm filtered Ig fraction Stabilizer: 0.1% bovine serum albumin Preservative: 0.02% sodium azide
Concentration:	lot specific
Purification:	Protein G
Conjugation:	Unconjugated
Storage:	Store at 2 - 8 °C.
Stability:	Shelf life: one year from despatch.
Gene Name:	pentraxin 3



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Database Link: [Entrez Gene 5806 Human P26022](#)

Background: PTX3 is an acute-phase glycoprotein of ~45 kDa with glycosylation accounting for about 10% of its molecular weight. PTX3 has a complex oligomeric structure with protomers linked to each other by disulfide bonds. PTX3 expression is triggered by inflammatory cytokines, resulting in higher levels of circulating PTX3. Several cell types have been reported to produce PTX3, namely macrophages, endothelial cells, neutrophils and synoviocytes. PTX3 is involved in host defense against pathogen infection, in the regulation of the scavenger activity of macrophages and dendritic cells, and in modulation of complement activity by binding to C1q. Furthermore, PTX3 has been implicated in matrix deposition of cumulus cells. Moreover, PTX3 interacts with other biologically active molecules, causing their functional blockade. This has been demonstrated for fibroblast growth factor-2 (FGF-2), for which PTX3 acts as an inhibitor, leading to inhibition of angiogenesis. PTX3, like other pentraxins C-reactive protein (CRP) and serum amyloid P component (SAP), binds apoptotic cells and debris. PTX3 is useful as an early indicator of myocyte irreversible injury in ischemic cardiomyopathy. PTX3 is not only involved in inflammatory vessel diseases related to atherosclerosis, but also in pre-eclampsia and systemic small vessel ANCA-associated vasculitis, in which neutrophils are key players. The relationship between tissue damage and pentraxin generation is stringent in acute injuries. PTX3 tunes self-non-self discrimination and tissue repair due to the recognition of diverse ligands by PTX3 and through regulation of effector pathways.

Synonyms: TNFAIP5, TSG14, TSG-14, Pentraxin-related protein PTX3, Pentaxin-related protein PTX3