



# ATS5 Monoclonal Antibody

<b>Catalog No</b>	YP-mAb-06983
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Rat;Mouse
<b>Applications</b>	WB
<b>Gene Name</b>	ADAMTS5 ADAMTS11 ADMP2
<b>Protein Name</b>	A disintegrin and metalloproteinase with thrombospondin motifs 5 (ADAM-TS 5) (ADAM-TS5) (ADAMTS-5) (EC 3.4.24.-) (A disintegrin and metalloproteinase with thrombospondin motifs 11) (ADAM-TS 11) (ADAMT
<b>Immunogen</b>	Synthesized peptide derived from part region of human protein
<b>Specificity</b>	ATS5 Monoclonal Antibody detects endogenous levels of protein.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, and 0.02% sodium azide.
<b>Source</b>	Monoclonal, Mouse,IgG
<b>Purification</b>	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	WB 1:500-1:2000
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	
<b>Observed Band</b>	102kD
<b>Cell Pathway</b>	Secreted, extracellular space, extracellular matrix .
<b>Tissue Specificity</b>	Expressed at low level in placenta primarily but also detected in heart and brain, cervix, uterus, bladder, esophagus, rib cartilage, chondroblastoma, fibrous tissue and a joint capsule from an arthritic patient.
<b>Function</b>	catalytic activity: Cleaves aggrecan at the 392-Glu- -Ala-393 site., cofactor: Binds 1 zinc ion per subunit., domain: The conserved cysteine present in the cysteine-switch motif binds the catalytic zinc ion, thus inhibiting the enzyme. The dissociation of the cysteine from the zinc ion upon the activation-peptide release activates the enzyme., domain: The spacer domain and the TSP type-1 domains are important for a tight interaction with the extracellular matrix., function: Cleaves aggrecan, a cartilage proteoglycan, and may be involved in its turnover. May play an important role in the destruction of aggrecan in arthritic diseases. May play a role in proteolytic processing mostly during the peri-implantation period., PTM: The precursor is cleaved by a furin endopeptidase., similarity: Contains 1 disintegrin domain., similarity: Contains 1 peptidase M12B domain., similarity: Contains 2 TSP type-1 domains

**Background**

This gene encodes a member of the ADAMTS (a disintegrin and metalloproteinase with thrombospondin motifs) protein family. Members of the family share several distinct protein modules, including a propeptide region, a metalloproteinase domain, a disintegrin-like domain, and a thrombospondin type 1 (TS) motif. Individual members of this family differ in the number of C-terminal TS motifs, and some have unique C-terminal domains. The encoded preproprotein is proteolytically processed to generate the mature enzyme. This enzyme contains two C-terminal TS motifs and functions as an aggrecanase that cleaves aggrecan, a major proteoglycan of cartilage, and may mediate cartilage destruction in osteoarthritis. [provided by RefSeq, Feb 2016],

**matters needing attention**

Avoid repeated freezing and thawing!

**Usage suggestions**

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

**Products Images**