

Anti-ADAMTS-7 antibody



Description Rabbit polyclonal to ADAMTS-7.

Model STJ91482

Host Rabbit

Reactivity Human

Applications ELISA, IHC

Immunogen Synthesized peptide derived from human ADAMTS-7

Immunogen Region 150-230 aa, Internal

Gene ID <u>11173</u>

Gene Symbol ADAMTS7

Dilution range IHC 1:100-1:300ELISA 1:40000

Specificity ADAMTS-7 Polyclonal Antibody detects endogenous levels of ADAMTS-7

protein.

Tissue Specificity Expressed in heart, brain, placenta, lung, liver, skeletal muscle, kidney and

pancreas. Detected in meniscus, bone, tendon, cartilage, synovium, fat and

ligaments.

Purification The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Note For Research Use Only (RUO).

Protein Name A disintegrin and metalloproteinase with thrombospondin motifs 7 ADAM-TS

7 ADAM-TS7 ADAMTS-7 COMPase

Molecular Weight 109.695 kDa

Clonality Polyclonal

Conjugation Unconjugated

Isotype IgG

Formulation Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Concentration 1 mg/ml

Storage Instruction Store at -20°C, and avoid repeat freeze-thaw cycles.

Database Links HGNC:223OMIM:605009

Alternative Names A disintegrin and metalloproteinase with thrombospondin motifs 7 ADAM-TS

7 ADAM-TS7 ADAMTS-7 COMPase

Function Metalloprotease that may play a role in the degradation of COMP.

Sequence and Domain Family The spacer domain and the TSP type-1 domains are important for a tight

interaction with the extracellular matrix.; 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.

Cellular Localization Secreted, extracellular space, extracellular matrix. Also found associated with

the external cell surface.

Post-translational N-glycosylated. Can be O-fucosylated by POFUT2 on a serine or a threonine **Modifications** residue found within the consensus sequence C1-X(2)-(S/T)-C2-G of the TSP

residue found within the consensus sequence C1-X(2)-(S/T)-C2-G of the TSP type-1 repeat domains where C1 and C2 are the first and second cysteine residue of the repeat, respectively. Fucosylated repeats can then be further

glycosylated by the addition of a beta-1,3-glucose residue by the

glucosyltransferase, B3GALTL. Fucosylation mediates the efficient secretion of ADAMTS family members. Also can be C-glycosylated with one or two mannose molecules on tryptophan residues within the consensus sequence W-X-X-W of the TPRs. N- and C-glycosylations can also facilitate secretion. O-glycosylated proteoglycan. Contains chondroitin sulfate. May be cleaved by a

furin endopeptidase. The precursor is sequentially processed.