

## **Anti-ADAMTS-12 antibody**



**Description** Rabbit polyclonal to ADAMTS-12.

Model STJ91478

**Host** Rabbit

**Reactivity** Human

**Applications** ELISA, IHC

Immunogen Synthesized peptide derived from human ADAMTS-12

Immunogen Region 1100-1180 aa, Internal

**Gene ID** 81792

Gene Symbol <u>ADAMTS12</u>

**Dilution range** IHC 1:100-1:300ELISA 1:20000

**Specificity** ADAMTS-12 Polyclonal Antibody detects endogenous levels of

ADAMTS-12 protein.

**Tissue Specificity** Expressed in skeletal muscle and fat. Detected at significant levels in fetal

lung. Widely expressed in gastric carcinomas and in cancer cells of diverse

origin.

**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 12 ADAM-

TS 12 ADAM-TS12 ADAMTS-12

Molecular Weight 177.545 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:14605OMIM:606184

Alternative Names A disintegrin and metalloproteinase with thrombospondin motifs 12 ADAM-

TS 12 ADAM-TS12 ADAMTS-12

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

also alpha-2 macroglobulin and aggregan. Has anti-tumorigenic properties.

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

interaction with the extracellular matrix. The C-terminal four TSP1-like repeats are necessary and sufficient for binding COMP.; 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

**Post-translational** The precursor is cleaved by a furin endopeptidase.; Subjected to an

intracellular maturation process yielding a 120 kDa N-terminal fragment containing the metalloproteinase, disintegrin, one TSP type-1 and the Cys-rich domains and a 83 kDa C-terminal fragment containing the spacer 2 and four TSP type-1 domains.; Glycosylated. Can be O-fucosylated by POFUT2 on a serine or a threonine 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, and N-glycosylated. These other

glycosylations can also facilitate secretion.

**Modifications**