

Rabbit Anti-ADAMTS10 /Cy5.5 Conjugated antibody

SL23478R-Cy5. 5

Product Name	Anti-ADAMTS10 /Cy5.5
Chinese Name	Cy5.5 标记的整合素样金属蛋白酶与凝血酶 10 型抗体
Alias	A disintegrin and metalloproteinase with thrombospondin motifs 10; A disintegrin like and metalloprotease (reprolysin type) with thrombospondin type 1 motif, 10; ADAM metalloproteinase with thrombospondin type 1 motif 10; ADAM TS10; EC 3.4.24; WMS; ATS10_HUMAN.
Research Area	Cell biology Signal transduction Extracellular matrix
Immunogen Species	Rabbit
Clonality	Polyclonal
React Species	Rat(predicted:Human,Mouse,Pig,Cow,Horse,Rabbit,Sheep) IF=1:100-500
Applications	not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight	95kDa
Form	Lyophilized or Liquid
Concentration	1mg/ml
immunogen	KLH conjugated synthetic peptide derived from human ADAMTS10
Lsotype	IgG
Purification	affinity purified by Protein A
Storage Buffer	Preservative: 15mM Sodium Azide, Constituents: 1% BSA, 1M PBS, pH 7.4. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 1M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
Storage	
Product Detail	background: ADAMTS10 is a member of the ADAMs family of proteinases with Thrombospondin motifs. The catalytic site of ADAMTS10 is typical of the metalloproteinase catalytic domains, with an HExxHxxxxxH sequence,

perhaps giving these enzymes some shared specificity. ADAMTS10 is closest in homology to ADAMTS6, sharing 53% overall identity. Functional mutations in ADAMTS10 have been linked to Weill Marchesani syndrome, a connective tissue disorder marked by fibrillin 1 misprocessing. ADAMTS10 has also been reported to be over expressed in breast cancer tissues and cell lines.

Function:

Metalloprotease that participate in microfibrils assembly. Microfibrils are extracellular matrix components occurring independently or along with elastin in the formation of elastic tissues.

Subunit:

Interacts with FBN1; this interaction promotes microfibrils assembly.

Subcellular Location:

Secreted, extracellular space, extracellular matrix.

Tissue Specificity:

Widely expressed in adult tissues.

Post-translational modifications:

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 (By similarity).

DISEASE:

Defects in ADAMTS10 are the cause of Weill-Marchesani syndrome 1 (WMS1) [MIM:277600]. WMS1 is a rare connective tissue disorder characterized by short stature, brachydactyly, joint stiffness, and eye abnormalities including microspherophakia, ectopia lentis, severe myopia and glaucoma.

Similarity:

Contains 1 disintegrin domain.
Contains 1 peptidase M12B domain.
Contains 1 PLAC domain.

Contains 5 TSP type-1 domains.

Database links:

[Entrez Gene: 81794](#) Human

[Entrez Gene: 224697](#) Mouse

[Entrez Gene: 314655](#) Rat

[Omim: 608990](#) Human

[SwissProt: Q9H324](#) Human

[SwissProt: P58459](#) Mouse

[Unigene: 657508](#) Human

[Unigene: 29304](#) Mouse

[Unigene: 135600](#) Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.