



20150120ML

Anti-Human ADAMTS4 (#10D5)

**FOR RESEARCH ONLY! NOT FOR HUMAN USE!**

Cat.-no.:	101-M210
Size:	100 µg
Lot. No.:	According to product label

Preparation: This antibody was produced from a hybridoma (mouse myeloma fused with spleen cells from a mouse) immunized with human ADAMTS-4 recombinant protein). The IgG2 fraction of the tissue culture supernatant was purified by Protein G affinity chromatography.

Target Background

Synonyms (Target):	ADAMTS4; ADMP-1; ADAMTS-2; ADAMTS-4
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ADAMTS4 (a disintegrin and metalloproteinase with thrombospondin motifs 4), also known as aggrecanase1, is a member of the family of secreted zinc proteases with a multidomain structure. The protein precursors consist of a signal peptide and the following domains: pro, catalytic, disintegrin-like, TS type I motif, cysteine-rich, and spacer. It is the only ADAMTS identified that has one TS type I motif. It is an active protease effectively cleaving α 2-macroglobulin and aggrecan at multiple sites, and is inhibited by TIMP3 with inhibition constants in subnanomolar range. It receives great attention due to the elevation in its mRNA level after treatment with Interleukin1. However, in a mouse model of osteoarthritis, ADAMTS4 knockout mice did not exhibit any significant protective effect. ADAMTS4 consists of a signal peptide (aa 1 to 51), a pro domain (aa 52 to 212) and a mature chain (aa 213 to 837) containing the following domains: catalytic (aa 218 to 425), disintegrin (aa 437 to 519), TSP type 1 (aa 520 to 575), Cysrich (aa 577 to 685) and spacer (aa 686 to 837). The amino acid sequence of rhADAMTS4 is 100%, 97% and 94% identical to that of chimpanzee, dog, and mouse/rat/bovine.

Database References Target

Protein RefSeq:	NP_005090
Uniprot ID:	O75173
mRNA RefSeq:	NM_005099

Product Specifications

Host	Mouse
Reactivity against	Human
Clonality	Monoclonal Antibody
Clone	(#10D5)
Isotype	IgG2
Purification	Protein G chromatography
Antigen	recombinant human ADAMTS-4
Formulation	lyophilized
Reconstitution buffer	PBS (sterile)

Reconstitution: Reconstitute the antibody with 200 µl sterile PBS and the final concentration is 500 µg/ml.

Stability: Lyophilized samples are stable for 2 years from date of receipt when stored at -70°C. Reconstituted antibody can be aliquoted and stored frozen at < -20 °C for at least for six months without detectable loss of activity.

Remarks: This antibody was selected for its ability to detect human ADAMTS-4.

**AVOID REPEATED FREEZE AND THAW CYCLES!**

Applications

The antibody can be used within the following applications:

WB, N

Recommended usage:

Western Blot: 1:500 - 1:1000

Neutralization: Yes

NOTE: OPTIMAL DILUTIONS SHOULD BE DETERMINED BY EACH LABORATORY FOR EACH APPLICATION!