Active Recombinant Human ADAMTS4, His-tagged

Cat. No. ADAMTS4-533H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant human ADAMTS-1 (residues 213 to 579 of full-length human ADAMTS-4) protein with His tag, was expressed in a*baculovirus*system and purified from insect cells, 40 kDa.
Species	Human
Source	Insect Cells
ProteinLength	213-579 a.a.
Description	Aggrecanases belong to a family of ADAMTS proteases (ADAMTS = A disintegrin and metalloprotease with thrombospondin motifs). ADAMTS enzymes are comprised of an N-terminal prodomain, a catalytic domain, a disintegrin domain, one or more thrombospondin (TS) motifs, a cysteine-rich domain and a spacer domain of variable length. The prodomains are cleaved off intracellularly and the enzymes are processed further from their C-terminal ends after secretion. Aggrecanases are responsible for aggrecan degradation in osteoarthritic joints. ADAMTS-4 (aggrecanase-1) is a major aggrecanase in human osteoarthritic cartilage.5 ADAMTS-4 hydrolyzes also versican and brevican.
Activity	Activity (mU/mg) is specified on the vial.
Unit Definition	One milliunit of protease hydrolyzes 1 nanomole of aggrecan interglobular domain substrate per minute at pH 7.5 at 37°C.

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Purity	> 90% as estimated by SDS-PAGE.
Formulation	50 mM Tris-HCl, pH 7.5, 150 mM NaCl, 5 mM CaCl2, 0.05% Brij-35.
Application	Used for screening of ADAMTS-4 inhibitors and for continuous assay of ADAMTS-4 activity and for FRET-based assay.
Storage	Store at -80°C. Avoid multiple thaw-freeze cycles.

GENE INFORMATION

Gene Name	ADAMTS4 ADAM metallopeptidase with thrombospondin type 1 motif, 4 [Homo sapiens]
Synonyms	ADAM metallopeptidase with thrombospondin type 1 motif, 4; ADMP-1; ADAMTS-2; ADAMTS-4; KIAA0688; ADAMTS4; a disintegrin and metalloproteinase with thrombospondin motifs 4; ADAM-TS4; ADAM-TS 4; aggrecanase-1; a disintegrin-like and metalloprotease (reprolysin type) with thrombospondin type 1 motif, 4; EC 3.4.24.82
Gene ID	9507
mRNA Refseq	NM_005099
Protein Refseq	NP_005090
MIM	603876
UniProt ID	O75173
Chromosome Location	1q21-q23

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Function	metal ion binding; metalloendopeptidase activity; metallopeptidase activity; peptidase activity; protease binding; zinc ion binding

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