Recombinant Human MMP2 Protein, His-tagged

Cat. No. MMP2-800H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant human MMP2 protein with His tag was expressed in HEK293.
Species	Human
Source	HEK293
Description	This gene is a member of the matrix metalloproteinase (MMP) gene family, that are zinc-dependent enzymes capable of cleaving components of the extracellular matrix and molecules involved in signal transduction. The protein encoded by this gene is a gelatinase A, type IV collagenase, that contains three fibronectin type II repeats in its catalytic site that allow binding of denatured type IV and V collagen and elastin. Unlike most MMP family members, activation of this protein can occur on the cell membrane. This enzyme can be activated extracellularly by proteases, or, intracellulary by its S-glutathiolation with no requirement for proteolytical removal of the pro-domain. This protein is thought to be involved in multiple pathways including roles in the nervous system, endometrial menstrual breakdown, regulation of vascularization, and metastasis. Mutations in this gene have been associated with Winchester syndrome and Nodulosis-Arthropathy-Osteolysis (NAO) syndrome. Alternative splicing results in multiple transcript variants encoding different isoforms.
Form	Lyophilized
Molecular Mass	71.8 kDa
AA Sequence	MEALMARGALTGPLRALCLLGCLLSHAAAAPSPIIKFPGDVAPKTDKELAVQYLNTFY

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	GCPKESCNLFVLKDTLKKMQKFFGLPQTGDLDQNTIETMRKPRCGNPDVANYNFFP RKPKWDKNQITYRIIGYTPDLDPETVDDAFARAFQVWSDVTPLRFSRIHDGEADIMIN FGRWEHGDGYPFDGKDGLLAHAFAPGTGVGGDSHFDDDELWTLGEGQVVRVKYG NADGEYCKFPFLFNGKEYNSCTDTGRSDGFLWCSTTYNFEKDGKYGFCPHEALFT MGGNAEGQPCKFPFRFQGTSYDSCTTEGRTDGYRWCGTTEDYDRDKKYGFCPET AMSTVGGNSEGAPCVFPFTFLGNKYESCTSAGRSDGKMWCATTANYDDDRKWGF CPDQGYSLFLVAAHEFGHAMGLEHSQDPGALMAPIYTYTKNFRLSQDDIKGIQELYG ASPDIDLGTGPTPTLGPVTPEICKQDIVFDGIAQIRGEIFFFKDRFIWRTVTPRDKPMG PLLVATFWPELPEKIDAVYEAPQEEKAVFFAGNEYWIYSASTLERGYPKPLTSLGLPP DVQRVDAAFNWSKNKKTYIFAGDKFWRYNEVKKKMDPGFPKLIADAWNAIPDNLDA VVDLQGGGHSYFFKGAYYLKLENQSLKSVKFGSIKSDWLGC
Purity	> 98%
Applications	WB; ELISA; FACS; FC
Stability	This bioreagent is stable at 4 centigrade (short-term) and -70 centigrade(long-term). After reconstitution, sample may be stored at 4 centigrade for 2-7 days and below -18 centigrade for future use.
Storage	At -20 centigrade.
Concentration	1 mg/mL
Storage Buffer	PBS (pH 7.4-7.5). Sterile-filtered colorless solution.
Reconstitution	Reconstitute in sterile distilled H2O to no less than 100 µg/mL; dilute reconstituted stock further in other aqueous solutions if needed. Please review COA for lot-specific instructions. Final measurements should be determined by the end-user for optimal performance.

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GENE INFORMATION

Gene Name	MMP2 matrix metallopeptidase 2 (gelatinase A, 72kDa gelatinase, 72kDa type IV collagenase) [Homo sapiens (human)]
Official Symbol	MMP2
Synonyms	MMP2; matrix metallopeptidase 2 (gelatinase A, 72kDa gelatinase, 72kDa type IV collagenase); CLG4, CLG4A, matrix metalloproteinase 2 (gelatinase A, 72kD gelatinase, 72kD type IV collagenase) , matrix metalloproteinase 2 (gelatinase A, 72kDa gelatinase, 72kDa type IV collagenase); 72 kDa type IV collagenase; TBE 1; MMP-2; gelatinase A; 72 kDa gelatinase; collagenase type IV-A; neutrophil gelatinase; matrix metalloproteinase-2; matrix metalloproteinase-II; CLG4; MONA; CLG4A; TBE-1; MMP-II;
Gene ID	4313
mRNA Refseq	NM_001127891
Protein Refseq	NP_001121363
MIM	120360
UniProt ID	P08253

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