

## Recombinant Human MMP13 protein, T7/His-tagged

**Cat. No.** MMP13-92H    **Lot. No.** (See product label)

### SPECIFICATION

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Overview</b> | Recombinant human MMP13 cDNA (104 – 471 aa, derived from BC074807), fused with T7-His-TEV cleavage site Tag (29aa) at N-terminal was expressed in E. coli.                                                                                                                                                                                                                                                                                         |
| <b>Species</b>          | Human                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Source</b>           | E.coli                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>ProteinLength</b>    | 104-471 a.a.                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Form</b>             | 0.50 mg/ml, sterile-filtered, in 20 mM pH 8.0 Tris-HCl Buffer, with proprietary formulation of NaCl, KCl, EDTA, arginine, DTT and Glycerol.                                                                                                                                                                                                                                                                                                        |
| <b>AA Sequence</b>      | MASMTGGQQMGRGRHHHHHHENLYFQGGEFYNVFPRTLKWSKMNLTYRIVNYTPD<br>MTHSEVEKAFKKAFKVWSDVT PLNFTRLHDGIADIMISFGIKEHGDFYPFDGPSGLL<br>AHAFPPGPNYGGDAHFDDDETWTSSSKGYNLFLVAAHEF GHSLGLDHSKDPGALM<br>FPIYTYTGKSHFMLPDDDDVQGIQSLYGPGDEDPNPKHPKTPDKCDPSLSLDAITSLR<br>GE TMIFKDRFFWRLHPQQVDAELFLTKSFWPELPNRIDAAYEHPSHDLIFIFRGRKF<br>WALNGYDILEGYPKKISELG LPKEVKKISA AVHFEDTGKTL LFSGNQVWRYDDTNHI<br>MDKDYPRLIEEDFPGIGDKVDAVYEKNGYIYFFNGPIQ FEYSIWSNRIVRVMPANSIL<br>WC |
| <b>Purity</b>           | >90% by SDS-PAGE                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Applications</b>     | 1. May be used for in vitro activated MMP13 mediated extracellular matrix protein signal regulation study for chondrocytes cell differentiation regulation or tumor cell                                                                                                                                                                                                                                                                           |

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metastasis with this protein as either coating matrix protein or soluble factor.2. May be used as MMP13 protein-protein interaction assay.3. As enzymatic substrate for various proteases.4. As potential cancer diagnostic biomarker protein.5. As antigen for specific antibody production.

**Storage**

Keep at -80centigrade for long term storage. Product is stable at 4 centigrade for at least 30 days.

## GENE INFORMATION

|                            |                                                                                                                                       |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| <b>Gene Name</b>           | MMP13 matrix metalloproteinase 13 (collagenase 3) [ Homo sapiens ]                                                                    |
| <b>Official Symbol</b>     | MMP13                                                                                                                                 |
| <b>Synonyms</b>            | MMP13; matrix metalloproteinase 13 (collagenase 3); matrix metalloproteinase 13 (collagenase 3); collagenase 3; CLG3; MMP-13; MANDP1; |
| <b>Gene ID</b>             | 4322                                                                                                                                  |
| <b>mRNA Refseq</b>         | NM_002427                                                                                                                             |
| <b>Protein Refseq</b>      | NP_002418                                                                                                                             |
| <b>MIM</b>                 | 600108                                                                                                                                |
| <b>UniProt ID</b>          | P45452                                                                                                                                |
| <b>Chromosome Location</b> | 11q22.3                                                                                                                               |
| <b>Pathway</b>             | Activation of Matrix Metalloproteinases, organism-specific biosystem; Degradation of                                                  |

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the extracellular matrix, organism-specific biosystem; Endochondral Ossification, organism-specific biosystem; Extracellular matrix organization, organism-specific biosystem; Matrix Metalloproteinases, organism-specific biosystem;

**Function**

calcium ion binding; calcium-dependent protein binding; fibronectin binding; low-density lipoprotein particle receptor binding; metalloendopeptidase activity; peptidase activity; zinc ion binding;

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