



# Recombinant Human Matrix metalloproteinase-20 (MMP20)

|                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Code</b>      | CSB-EP014667HU-B                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Storage</b>           | Store at -20°C, for extended storage, conserve at -20°C or -80°C.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Uniprot No.</b>       | O60882                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Product Type</b>      | Recombinant Protein                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Immunogen Species</b> | Homo sapiens (Human)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Purity</b>            | ≥85% (SDS-PAGE)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Sequence</b>          | YRL FPGEPKWKKN TLTYRISKYT PSMSSVEVDK AVEMALQAWS<br>SAVPLSFVRI NSGEADIMIS FENGDHGDSY PFDGPRGTLA HAFAPGEGLG<br>GDTHFDNAEK WTMGTNGFNL FTVAAHEFGH ALGLAHSTDP SALMYPTYKY<br>KNPYGFHLPK DDVKGIQALY GPRKVFLGKP TLPHAPHHKP SIPDLCDSSS<br>SFDAVTMLGK ELLLFKDRIF WRRQVHLRTG IRPSTITSSF PQLMSNVDA<br>YEVAERGTAY FFKGPHYWIT RGFQMQGPPR TIYDFGFPRH VQQIDAAYL<br>REPQKTLFFV GDEYYSYDER KRKMEKDYPK NTEEEFSGVN GQIDAAVELN<br>GYIYFFSGPK TYKYDTEKED VVSVKSSSW IGC                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Source</b>            | E.coli                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Target Names</b>      | MMP20                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Protein Names</b>     | Recommended name: Matrix metalloproteinase-20 Short name= MMP-20 EC= 3.4.24.- Alternative name(s): Enamel metalloproteinase Enamelysin                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Expression Region</b> | 108-483                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Notes</b>             | Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Tag Info</b>          | Tag type will be determined during the manufacturing process.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Protein Length</b>    | Full Length of Mature Protein                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Target Details</b>    | Proteins of the matrix metalloproteinase (MMP) family are involved in the breakdown of extracellular matrix in normal physiological processes, such as embryonic development, reproduction, and tissue remodeling, as well as in disease processes, such as arthritis and metastasis. Most MMP s are secreted as inactive proproteins which are activated when cleaved by extracellular proteinases. This protein degrades amelogenin, the major protein component of dental enamel matrix, and so the protein is thought to play a role in tooth enamel formation. A mutation in this gene, which alters the normal splice pattern and results in premature termination of the encoded protein, has been associated with amelogenesis imperfecta. This gene is part of a cluster of MMP genes that localizes to chromosome 11q22.3. |
| <b>Reconstitution</b>    | We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |



concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

#### Shelf Life

The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself.

Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.