

HUMAN MMP13 PROTEIN, HIS TAG**Cat.#:** 11494**Product Name:** Human MMP13 Protein**Size:** 10 µg, 50 µg and 100 µg**Synonyms:** MMP-13; Collagenase 3; Matrix metalloproteinase-13**Target:** MMP13**UNIPROT ID:** P45452**Description:** Recombinant human MMP13 Protein with C-terminal 6xHis tag

Background: This gene encodes a member of the peptidase M10 family of matrix metalloproteinases (MMPs). Proteins in this 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. The encoded preproprotein is proteolytically processed to generate the mature protease. This protease cleaves type II collagen more efficiently than types I and III. It may be involved in articular cartilage turnover and cartilage pathophysiology associated with osteoarthritis. Mutations in this gene are associated with metaphyseal anadysplasia. This gene is part of a cluster of MMP genes on chromosome 11. [provided by RefSeq, Jan 2016]

Species/Host: HEK293

Molecular Weight: The protein has a predicted molecular mass of 52.5 kDa after removal of the signal peptide. The apparent molecular mass of MMP13-His is approximately 55–70 kDa due to glycosylation.

Molecular Characterization: MMP13(Leu20–Cys471) 6×His tag

Purity: The purity of the protein is greater than 85% as determined by SDS-PAGE and Coomassie blue staining.

Formulation & Reconstitution: Lyophilized from nanodisc solubilization buffer (20 mM Tris-HCl, 150 mM NaCl, pH 8.0). Normally 5% – 8% trehalose is added as protectants before lyophilization.

Storage & Shipping: Store at –20°C to –80°C for 12 months in lyophilized form. After reconstitution, if not intended for use within a month, aliquot and store at –80°C (Avoid repeated freezing and thawing). Lyophilized proteins are shipped at ambient temperature.

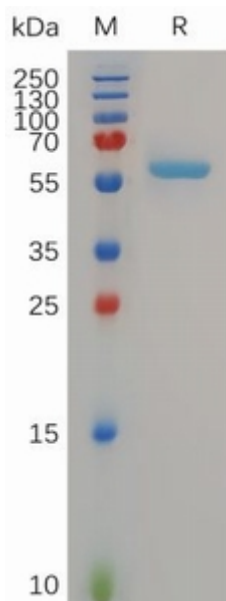


Figure 1. Human MMP13, His Tag on SDS-PAGE under reducing condition.