

Basic Information

Product Name	Anti-MMP13 Antibody
Gene Name	MMP13
Source	Rabbit
Isotype	IgG
Species Reactivity	human, monkey
Tested Application	WB
Contents	500 ug/ml antibody with PBS , 0.02% Na ₂ S ₂ O ₃ , 1 mg BSA and 50% glycerol.
Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human MMP13 (109-154aa RTLKWSKMNLTYRIVNYTPDMTHSEVEKAFKKAFKVWSDVTPLNFT), different from the related mouse sequence by four amino acids, and from the related rat sequence by five amino acids.
concentration	500 ug/ml
Purification	Immunogen affinity purified.
Observed MW	54KD
Dilution Ratios	Western blot(WB):1:500-2000

Storage

12 months from date of receipt, -20°C as supplied. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

Background Information

Collagenase 3 is an enzyme that in humans is encoded by the MMP13 gene. 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.

Selected Validation Data

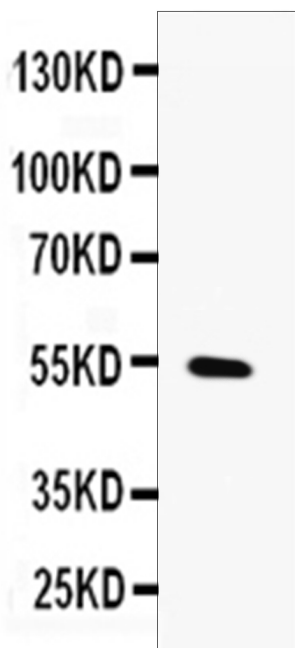


Figure 1. Western blot analysis of MMP13 using anti-MMP13 antibody (A00420). The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: HELA whole cell lysates. probed with a goat anti-rabbit IgG-HRP secondary antibody . The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) A specific band was detected for MMP13 at approximately 54KD. The expected band size for MMP13 is at 54KD.