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MMP20 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP13895b

Product Information

Application	WB, E
Primary Accession	O60882
Other Accession	O18767, NP_004762.2
Reactivity	Human
Predicted	Bovine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB34032
Calculated MW	54387
Antigen Region	399-428

Additional Information

Gene ID	9313
Other Names	Matrix metalloproteinase-20, MMP-20, 3424-, Enamel metalloproteinase, Enamelysin, MMP20
Target/Specificity	This MMP20 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 399-428 amino acids from the C-terminal region of human MMP20.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	MMP20 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	MMP20
Function	Degrades amelogenin, the major protein component of the enamel matrix and two of the macromolecules characterizing the cartilage extracellular

	matrix: aggrecan and the cartilage oligomeric matrix protein (COMP). May play a central role in tooth enamel formation. Cleaves aggrecan at the '360-Asn-|-Phe-361' site.
Cellular Location	Secreted, extracellular space, extracellular matrix
Tissue Location	Expressed specifically in the enamel organ.

Background

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. The protein encoded by this gene 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.

References

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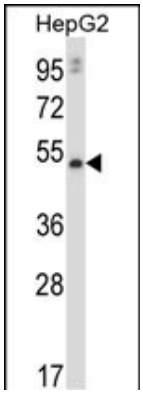
Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) :
Wojciechowski, R., et al. Invest. Ophthalmol. Vis. Sci. (2010) In press :
Lee, S.K., et al. J. Dent. Res. 89(1):46-50(2010)
Talmud, P.J., et al. Am. J. Hum. Genet. 85(5):628-642(2009)

Images



MMP20 Antibody (C-term) (Cat. #AP13895b) western blot analysis in HepG2 cell line lysates (35ug/lane).This demonstrates the MMP20 antibody detected the MMP20 protein (arrow).