10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

MMP20 Rabbit pAb

Catalog # AP99683

Product Information

Application	WB, IHC-P, IHC-F, IF, E
Primary Accession	O60882
Other Accession	O60882
Predicted	Rat, Pig, Human, Mouse, Rabbit, Dog, Horse, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	54387
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human MMP20
Epitope Specificity	51-150/483
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the peptidase M10A family.Contains 4 hemopexin-like domains.
Post-translational modifications	Autoactivates at least at the 107-Asn-|-Tyr-108 site.
DISEASE	Amelogenesis imperfecta, hypomaturation type, 2A2 (AI2A2) [MIM:612529]: A defect of enamel formation. The disorder involves both primary and secondary dentitions. The teeth have a shiny agar jelly appearance and the enamel is softer than normal. Brown pigment is present in middle layers of enamel. Note=The disease is caused by mutations affecting the gene represented in this entry.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	p65 is a subunit of the nuclear factor kappa-B, a second messenger, which activates the transcription of a number of genes in multiple tissues. The inhibitory effect of I-kappa-B upon NF-kappa-B in the cytoplasm is exerted primarily through the interaction with p65. p65 shows a weak DNA-binding site which could contribute directly to DNA binding in the NF-kappa-B complex. Active NF-kappa-B is a heterodimer of an about 50 kDa DNA-binding subunit and the weak DNA-binding subunit p65. Two heterodimers might form a labile tetramer. Subcellular location is at Nucleus, Cytoplasm. Nuclear, but also found in the cytoplasm in an inactive form complexed to an inhibitor (I-kappa-B). Tissue Specificity: Spleen; lower level in brain.

Additional Information

Gene ID	9313
Other Names	AI2A2; MMP-20; MMP20_HUMAN; MMP20; Enamel metalloproteinase; Enamelysin; 3.4.24.-; MMP20_MOUSE; matrix metallopeptidase 20; matrix metalloproteinase 20 (enamelysin)

Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.