


Product datasheet

Anti-MMP20 antibody ab84737

2 References 1 Image

Overview

Product name	Anti-MMP20 antibody
Description	Rabbit polyclonal to MMP20
Host species	Rabbit
Tested applications	Suitable for: WB
Species reactivity	Reacts with: Human Predicted to work with: Mouse, Rat, Rabbit, Horse, Cow, Cat, Dog, Pig 
Immunogen	Synthetic peptide corresponding to a region within the internal amino acids 396-445 (AAVYLREPQK TLFFVGDEYY SYDERKCRKME KDYPKNTEEE FSGVNGQIDA) of Human MMP20 (NP_004762).
Positive control	HepG2 cell lysate.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
Storage buffer	Preservative: 0.09% Sodium azide Constituents: 2% Sucrose, PBS
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab84737** in the following tested applications.

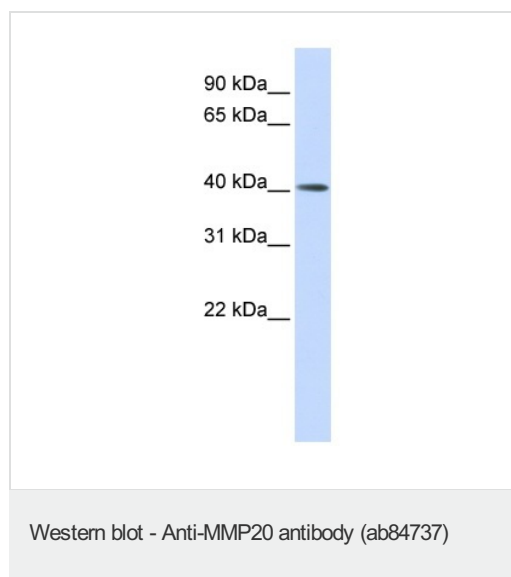
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use a concentration of 1 µg/ml. Detects a band of approximately 43 kDa (predicted molecular weight: 54 kDa). Good results were obtained when blocked with 5% non-fat dry milk in 0.05% PBS-T.

Target

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.
Tissue specificity	Expressed specifically in the enamel organ.
Involvement in disease	Defects in MMP20 are the cause of amelogenesis imperfecta hypomaturation type 2A2 (AI2A2) [MIM:612529]. AI2A2 is an autosomal recessive 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.
Sequence similarities	Belongs to the peptidase M10A family. Contains 4 hemopexin-like domains.
Domain	The conserved cysteine present in the cysteine-switch motif binds the catalytic zinc ion, thus inhibiting the enzyme. The dissociation of the cysteine from the zinc ion upon the activation-peptide release activates the enzyme.
Post-translational modifications	Autoactivates at least at the 107-Asn-Tyr-108 site.
Cellular localization	Secreted > extracellular space > extracellular matrix.

Images



Anti-MMP20 antibody (ab84737) at 1 µg/ml (in 5% skim milk / PBS buffer) + HepG2 cell lysate at 10 µg

Secondary

HRP conjugated anti-Rabbit IgG at 1/50000 dilution

Predicted band size: 54 kDa

Observed band size: 43 kDa

[why is the actual band size different from the predicted?](#)

12% gel

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