abcam

Product datasheet

Anti-MMP20 antibody [EP1275Y] ab76109

Recombinant RabMAb

4 References 2 Images

Overview

Product name Anti-MMP20 antibody [EP1275Y]

Description Rabbit monoclonal [EP1275Y] to MMP20

Host species Rabbit

Suitable for: WB **Tested applications**

Unsuitable for: Flow Cyt,ICC/IF or IP

Reacts with: Human Species reactivity

Predicted to work with: Mouse, Rat

Immunogen Synthetic peptide within Human MMP20 aa 450-550 (C terminal). The exact sequence is

proprietary.

Positive control HeLa whole cell lysate (ab150035); HeLa cells.

General notes The production method for this product has been changed from hybridoma to recombinant on 15th

April 2024

This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb patents**.

Properties

Form Liquid

Storage instructions Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid repeated freeze / thaw cycles.

Storage buffer pH: 7.20

Preservative: 0.05% Sodium azide

Constituents: 0.1% BSA, 40% Glycerol (glycerin, glycerine), 59% PBS

Purity Protein A purified

Clonality Monoclonal
Clone number EP1275Y
Isotype IqG

Applications

The Abpromise guarantee Our Abpromise guarantee covers the use of ab76109 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		1/500. Detects a band of approximately 54 kDa (predicted molecular weight: 54 kDa).

Application notes Is unsuitable for Flow Cyt,ICC/IF or IP.

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.

Defects in MMP20 are the cause of amelogenesis imperfecta hypomaturation type 2A2 (Al2A2) [MIM:612529]. Al2A2 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.

DomainThe 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-

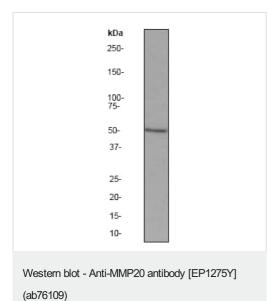
peptide release activates the enzyme.

Autoactivates at least at the 107-Asn-

Post-translationalAutoactivatesmodifications-Tyr-108 site.

Cellular localization Secreted > extracellular space > extracellular matrix.

Images

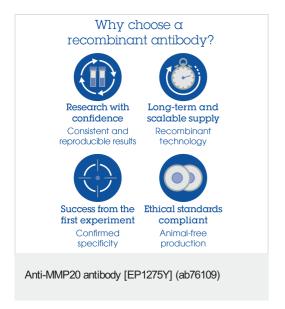


Anti-MMP20 antibody [EP1275Y] (ab76109) at 1/500 dilution + HeLa cell lysate at 10 µg

Secondary

goat anti-rabbit HRP at 1/2000 dilution

Predicted band size: 54 kDa **Observed band size:** 54 kDa



Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours

- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit https://www.abcam.com/abpromise or contact our technical team.

Terms and conditions

• Guarantee only valid for products bought direct from Abcam or one of our authorized distributors