

Product datasheet

Anti-MMP13 antibody [EP1263Y] ab51072

Recombinant RabMAb

[50 References](#) [2 Images](#)

Overview

Product name	Anti-MMP13 antibody [EP1263Y]
Description	Rabbit monoclonal [EP1263Y] to MMP13
Host species	Rabbit
Tested applications	Suitable for: WB Unsuitable for: Flow Cyt, ICC/IF, IHC-Fr, IHC-P or IP
Species reactivity	Reacts with: Human
Immunogen	Synthetic peptide within Human MMP13 (C terminal). The exact sequence is proprietary.
Positive control	HeLa whole cell lysate (ab150035).
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p> <p>Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.5% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EP1263Y

Isotype

IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab51072 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		1/1000. Detects a band of approximately 54 kDa (predicted molecular weight: 54 kDa). For unpurified use at 1/500

Application notes

Is unsuitable for Flow Cyt, ICC/IF, IHC-Fr, IHC-P or IP.

Target

Function

Degrades collagen type I. Does not act on gelatin or casein. Could have a role in tumoral process.

Tissue specificity

Seems to be specific to breast carcinomas.

Involvement in disease

Defects in MMP13 are the cause of spondyloepimetaphyseal dysplasia Missouri type (SEMD-MO) [MIM:602111]. A bone disease characterized by moderate to severe metaphyseal changes, mild epiphyseal involvement, rhizomelic shortening of the lower limbs with bowing of the femora and/or tibiae, coxa vara, genu varum and pear-shaped vertebrae in childhood. Epimetaphyseal changes improve with age.

Defects in MMP13 are the cause of metaphyseal anadysplasia type 1 (MANDP1) [MIM:602111]. Metaphyseal anadysplasia consists of an abnormal bone development characterized by severe skeletal changes that, in contrast with the progressive course of most other skeletal dysplasias, resolve spontaneously with age. Clinical characteristics are evident from the first months of life and include slight shortness of stature and a mild varus deformity of the legs. Patients attain a normal stature in adolescence and show improvement or complete resolution of varus deformity of the legs and rhizomelic micromelia.

Sequence similarities

Belongs to the peptidase M10A family.
Contains 4 hemopexin-like domains.

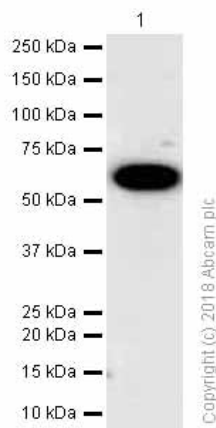
Domain

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.

Cellular localization

Secreted > extracellular space > extracellular matrix.

Images



Western blot - Anti-MMP13 antibody [EP1263Y]
(ab51072)

Anti-MMP13 antibody [EP1263Y] (ab51072) at 1/1000 dilution
(Purified) + HeLa (Human cervix adenocarcinoma epithelial cell)
whole cell lysates at 15 µg

Secondary

Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/20000 dilution

Predicted band size: 54 kDa

Observed band size: 60 kDa

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-MMP13 antibody [EP1263Y] (ab51072)

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

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