Product datasheet

Anti-MMP13 antibody [EP1263Y] ab51072

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: Rat and mouse: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.

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

We are constantly working hard to ensure we provide our customers with best in class antibodies. As a result of this work we are pleased to now offer this antibody in purified format. We are in the process of updating our datasheets. The purified format is designated 'PUR' on our product labels. If you have any questions regarding this update, please contact our Scientific Support team.

This product is a recombinant rabbit monoclonal antibody.

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, 0.5% BSA
Purity: Protein A purified
Clonality: Monoclonal
Clone number  EP1263Y
Isotype  IgG

Applications

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.

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<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
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<tbody>
<tr>
<td>WB</td>
<td>1/1000. Detects a band of approximately 54 kDa (predicted molecular weight: 54 kDa). For unpurified use at 1/500</td>
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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 spondyloepimetafysseal dysplasia Missouri type (SEMD-MO) [MIM:602111]. A bone disease characterized by moderate to severe metaphysseal changes, mild epiphysseal 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. Epimetafysseal changes improve with age. Defects in MMP13 are the cause of metaphysseal anadysplasia type 1 (MANDP1) [MIM:602111]. Metaphysseal 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
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 is the actual band size different from the predicted?*

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**Please note:** All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE"

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**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](https://www.abcam.com/abpromise) or contact our technical team.

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