abcam

Product datasheet

Anti-MMP12 antibody [EP1261Y] ab52897

Recombinant RabMAb

34 References 4 Images

Overview

Product name Anti-MMP12 antibody [EP1261Y]

Description Rabbit monoclonal [EP1261Y] to MMP12

Host species Rabbit

Suitable for: WB, IP **Tested applications**

Unsuitable for: Flow Cyt or IHC-P

Species reactivity Reacts with: Human, Recombinant fragment

Synthetic peptide within Human MMP12 aa 450 to the C-terminus (C terminal). The exact **Immunogen**

> sequence is proprietary. Database link: P39900

General notes 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. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C.

Stable for 12 months at -20°C.

Storage buffer pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol, 0.05% BSA

Purity Protein A purified

Clonality Monoclonal Clone number EP1261Y

Isotype ΙgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab52897 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 - 1/10000. Detects a band of approximately 54 kDa (predicted molecular weight: 54 kDa).
IP		1/20. For unpurified use at 1/30.

Application notes

Is unsuitable for Flow Cyt or IHC-P.

Target

Function May be involved in tissue injury and remodeling. Has significant elastolytic activity. Can accept large and small amino acids at the P1' site, but has a preference for leucine. Aromatic or hydrophobic residues are preferred at the P1 site, with small hydrophobic residues (preferably alanine) occupying P3.

Tissue specificity Found in alveolar macrophages but not in peripheral blood monocytes.

Sequence similaritiesBelongs 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-

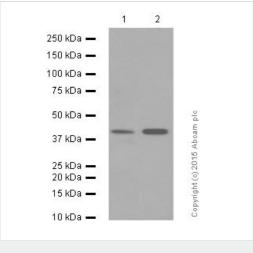
peptide release activates the enzyme.

Cellular localization Secreted > extracellular space > extracellular matrix.

Form The presence of a 22kDa truncated active form of MMP-12 in vitro as well as in vivo due to the

internal autolytic cleavage of the C-terminus.

Images



Western blot - Anti-MMP12 antibody [EP1261Y] (ab52897)

All lanes: Anti-MMP12 antibody [EP1261Y] (ab52897) at 1/2000 dilution (purified)

Lane 1: HT-1080 cell lysate

Lane 2: WI-38 cell lysate

Lysates/proteins at 10 µg per lane.

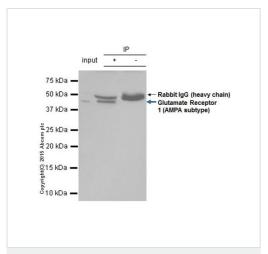
Secondary

All lanes : Goat Anti-Rabbit lgG H&L (HRP) (ab97051) at 1/1000 dilution (Goat Anti-Rabbit lgG, (H+L), Peroxidase conjugated)

Predicted band size: 54 kDa

Blocking buffer and concentration: 5% NFDM/TBST.

Diluting buffer and concentration: 5% NFDM /TBST.

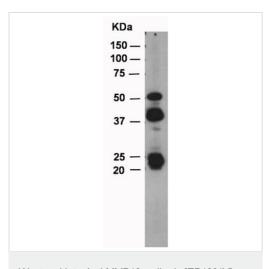


Immunoprecipitation - Anti-MMP12 antibody [EP1261Y] (ab52897)

ab52897 (purified) at 1/20 immunoprecipitating Glutamate Receptor 1 in HeLa whole cell lysate. 10 ug of cell lysate was present in the input. For western blotting, a HRP-conjugated Veriblot for IP Detection Reagent (ab131366) (1/1,500) was used for detection. A rabbit monoclonal IgG (ab172730) was used intead of ab128913 as a negative control (Lane 3).

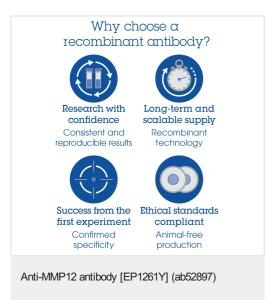
Blocking buffer and concentration: 5% NFDM/TBST.

Diluting buffer and concentration: 5% NFDM /TBST.



Based on Western blot, unpurified ab52897 recognizes both pro and active MMP. The propeptide is 54 kDa, and 45 kDa and 22 kDa are active forms. The primary was used at 1:100 to detect recombinant MMP12 protein, but can be diluted more to decrease the intensity of the bands.





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