abcam

Product datasheet

Anti-Hsp47 antibody [EPR4217] - BSA and Azide free ab226052

KO VALIDATED Recombinant RabMAb

3 Images

Overview

Product name	Anti-Hsp47 antibody [EPR4217] - BSA and Azide free
Description	Rabbit monoclonal [EPR4217] to Hsp47 - BSA and Azide free
Host species	Rabbit
Tested applications	**Suitable for:** WB, IHC-P
Species reactivity	**Reacts with:** Mouse, Human **Predicted to work with:** Rat
Immunogen	Synthetic peptide within Human Hsp47 aa 400-500. The exact sequence is proprietary.
Positive control	WB: HAP1, HeLa and HepG2 cell lysates.
General notes	Ab226052 is the carrier-free version of ab109117. This format is designed for use in antibody labeling, including fluorochromes, metal isotopes, oligonucleotides, enzymes. Our carrier-free formats are supplied in a buffer free of BSA, sodium azide and glycerol for higher conjugation efficiency. Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold. ab226052 is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm. *Maxpar® is a trademark of Fluidigm Canada Inc.* Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMab® patents. This product is a recombinant rabbit monoclonal antibody.

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	Constituent: PBS
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR4217
Isotype	IgG

Applications

Our Abpromise guarantee covers the use of **ab226052** in the following tested applications.

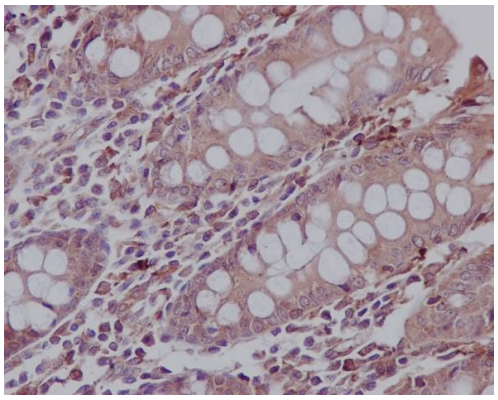
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use at an assay dependent concentration. Predicted molecular weight: 46 kDa.
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. See IHC antigen retrieval protocols.

Target

Function	Binds specifically to collagen. Could be involved as a chaperone in the biosynthetic pathway of collagen.
Involvement in disease	Note=Defects in SERPINH1 may cause severe autosomal recessive osteogenesis imperfecta (OI). Osteogenesis imperfecta defines a group of connective tissue disorders characterized by bone fragility and low bone mass.
Sequence similarities	Belongs to the serpin family.
Cellular localization	Endoplasmic reticulum lumen.

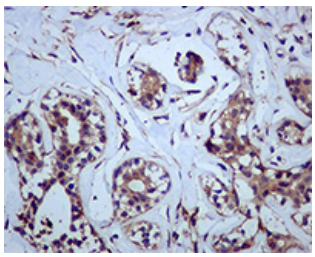
Images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Hsp47 antibody [EPR4217] - BSA and Azide free (ab226052)

ab109117 staining Hsp47 in Human colon tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed and paraffin-embedded, antigen retrieval was by heat mediation in Tris/EDTA buffer pH9. Samples were incubated with primary antibody (1/300). An undiluted HRP-conjugated mouse anti-rabbit IgG was used as the secondary antibody. Tissue counterstained with Hematoxylin.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab109117).

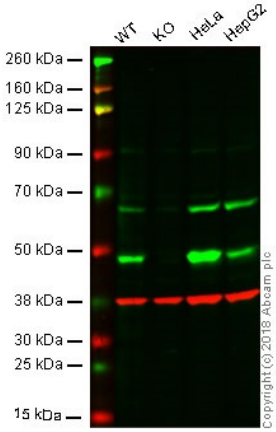


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Hsp47 antibody [EPR4217] - BSA and Azide free (ab226052)

ab109117, unpurified, at 1/100 dilution, staining Hsp47 in Human breast tissue by Immunohistochemistry.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab109117).

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Western blot - Anti-Hsp47 antibody [EPR4217] - BSA and Azide free (ab226052)

Lane 1: Wild-type HAP1 whole cell lysate (20 µg)
Lane 2: Hsp47 knockout HAP1 whole cell lysate (20 µg)
Lane 3: HeLa whole cell lysate (20 µg)
Lane 4: HepG2 whole cell lysate (20 µg)

Lanes 1 - 4: Merged signal (red and green). Green - ab109117 observed at 46 kDa. Red - loading control, ab9484, observed at 37 kDa.

ab109117 was shown to recognize Hsp47 in wild-type HAP1 cells as signal was lost at the expected MW in Hsp47 knockout cells. Additional cross-reactive bands were observed in the wild-type and knockout cells. Wild-type and Hsp47 knockout samples were subjected to SDS-PAGE. ab109117 and ab9484 (Mouse anti-GAPDH loading control) were incubated overnight at 4°C at 1/1000 dilution and 1/20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed ab216773 and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed ab216776 secondary antibodies at 1/20000 dilution for 1 hour at room temperature before imaging.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab109117).

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