abcam

Product datasheet

Anti-HUS1 antibody [EPR5132] ab109371

Recombinant RabMAb

4 Images

Overview

Product name Anti-HUS1 antibody [EPR5132]

Description Rabbit monoclonal [EPR5132] to HUS1

Host species Rabbit

Tested applications Suitable for: Flow Cyt (Intra), WB, IHC-P

Unsuitable for: ICC/IF

Reacts with: Human Species reactivity

Immunogen Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

Positive control HeLa, K562, and A431 cell lysates, Human breast carcinoma tissue

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

- 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**.

Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with

these species. Please contact us for more information.

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.

Storage buffer pH: 7.20

Preservative: 0.05% Sodium azide

Constituents: 0.1% BSA, 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% Tissue

culture supernatant

Purity Protein A purified

Clonality Monoclonal

Clone number EPR5132

Isotype IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab109371 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
Flow Cyt (Intra)		1/100 - 1/500. ab172730 - Rabbit monoclonal lgG, is suitable for use as an isotype control with this antibody.
WB		1/1000 - 1/10000. Detects a band of approximately 34 kDa (predicted molecular weight: 32 kDa).
IHC-P		1/100 - 1/250. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

Application notes

Is unsuitable for ICC/IF.

Target

Function

Component of the 9-1-1 cell-cycle checkpoint response complex that plays a major role in DNA repair. The 9-1-1 complex is recruited to DNA lesion upon damage by the RAD17-replication factor C (RFC) clamp loader complex. Acts then as a sliding clamp platform on DNA for several proteins involved in long-patch base excision repair (LP-BER). The 9-1-1 complex stimulates DNA polymerase beta (POLB) activity by increasing its affinity for the 3'-OH end of the primer-template and stabilizes POLB to those sites where LP-BER proceeds; endonuclease FEN1 cleavage activity on substrates with double, nick, or gap flaps of distinct sequences and lengths; and DNA ligase I (LIG1) on long-patch base excision repair substrates.

Tissue specificity

Ubiquitous.

Sequence similarities

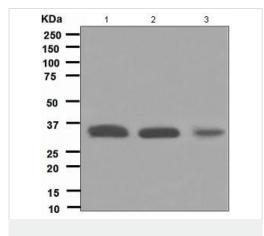
Belongs to the HUS1 family.

Cellular localization

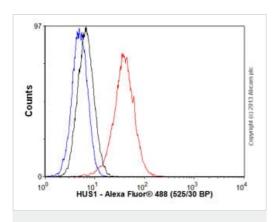
Nucleus. Cytoplasm. In discrete nuclear foci upon DNA damage. According to PubMed:14500360, localized also in the cytoplasm. DNA damage induces its nuclear

translocation. Shuttles between the nucleus and the cytoplasm.

Images



Western blot - Anti-HUS1 antibody [EPR5132] (ab109371)



Flow Cytometry (Intracellular) - Anti-HUS1 antibody [EPR5132] (ab109371)

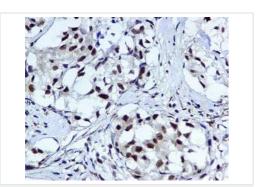
All lanes : Anti-HUS1 antibody [EPR5132] (ab109371) at 1/1000 dilution

Lane 1 : HeLa cell lysate Lane 2 : K562 cell lysate Lane 3 : A431 cell lysate

Lysates/proteins at 10 µg per lane.

Predicted band size: 32 kDa **Observed band size:** 34 kDa

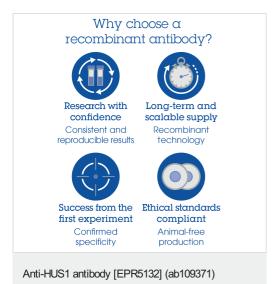
Overlay histogram showing HeLa cells stained with ab109371 (red line). The cells were fixed with 4% paraformaldehyde (10 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab109371, 1/1000 dilution) for 30 min at 22°C. The secondary antibody used was Alexa Fluor[®] 488 goat anti-rabbit IgG (H+L) (ab150077) at 1/2000 dilution for 30 min at 22°C. Isotype control antibody (black line) was rabbit IgG (monoclonal) (0.1µg/1x10⁶ cells) used under the same conditions. Unlabelled sample (blue line) was also used as a control. Acquisition of >5,000 events were collected using a 20mW Argon ion laser (488nm) and 525/30 bandpass filter. This antibody gave a positive signal in HeLa cells fixed with 80% methanol (5 min)/permeabilized with 0.1% PBS-Tween for 20 min used under the same conditions.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-HUS1 antibody
[EPR5132] (ab109371)

Immunohistochemical analysis of paraffin-embedded Human breast carcinoma tissue using ab109371 at a dilution of 1/100.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



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

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