# abcam

# Product datasheet

# Anti-HUS1 antibody [EPR5132] - BSA and Azide free ab247838



# 4 Images

#### Overview

**Product name** Anti-HUS1 antibody [EPR5132] - BSA and Azide free

**Description** Rabbit monoclonal [EPR5132] to HUS1 - BSA and Azide free

**Host species** Rabbit

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

Unsuitable for: ICC/IF

Species reactivity Reacts with: Human

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

**General notes** ab247838 is the carrier-free version of ab109371.

> Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for

increased conjugation efficiency.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cellbased assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

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.

This product is compatible with the Maxpar<sup>®</sup> Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar<sup>®</sup> is a trademark of Fluidigm Canada Inc.

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** 

Storage instructions Shipped at 4°C. Store at +4°C. Do Not Freeze.

Storage buffer pH: 7.2

Constituent: PBS

Carrier free Yes

Purity Protein A purified

Clonality Monoclonal
Clone number EPR5132

**Isotype** IgG

#### **Applications**

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab247838 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
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.
Flow Cyt (Intra)		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Detects a band of approximately 34 kDa (predicted molecular weight: 32 kDa).

**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.

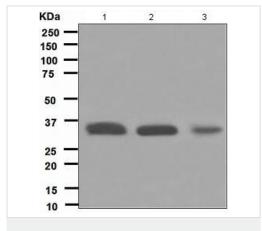
**Sequence similarities**Belongs to the HUS1 family.

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**



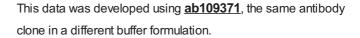
Western blot - Anti-HUS1 antibody [EPR5132] - BSA and Azide free (ab247838)

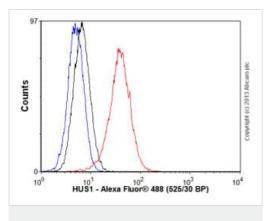


Lane 1 : HeLa cell lysate Lane 2 : K562 cell lysate Lane 3 : A431 cell lysate

Lysates/proteins at 10 µg per lane.

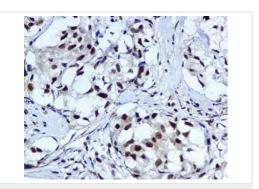
**Predicted band size:** 32 kDa **Observed band size:** 34 kDa





Flow Cytometry (Intracellular) - Anti-HUS1 antibody [EPR5132] - BSA and Azide free (ab247838)

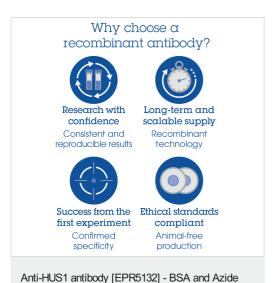
This data was developed using **ab109371**, the same antibody clone in a different buffer formulation. Overlay histogram showing HeLa cells stained with ab109371 (red line). The cells were fixed with 4% paraformaldehyde (10 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then 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 lgG (H+L) (ab150077) at 1/2000 dilution for 30 min at 22°C. Isotype control antibody (black line) was rabbit lgG (monoclonal) (0.1?g/1x10<sup>6</sup> 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] - BSA and Azide free (ab247838)

This data was developed using <u>ab109371</u>, the same antibody clone in a different buffer formulation.lmmunohistochemical analysis of paraffin-embedded Human breast carcinoma tissue using <u>ab109371</u> at a dilution of 1/100. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



free (ab247838)

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

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