abcam

Product datasheet

Anti-hHR23b antibody ab223776

7 Images

Overview

Product name	Anti-hHR23b antibody
Description	Rabbit polyclonal to hHR23b
Host species	Rabbit
Tested applications	**Suitable for:** WB, IHC-P, ICC/IF
Species reactivity	**Reacts with:** Human **Predicted to work with:** Mouse, Rat, Cow
Immunogen	Recombinant fragment corresponding to Human hHR23b aa 200-300. Database link: **P54727** Run BLAST with Run BLAST with
Positive control	WB: Human cell line RH-30. IHC-P: Human stomach tissue. ICC/IF: A431 cells.
General notes	The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

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 long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.20 Preservative: 0.02% Sodium azide Constituents: 40% Glycerol (glycerin, glycerine), PBS
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab223776 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 a concentration of 0.04 - 0.4 µg/ml. Predicted molecular weight: 43 kDa.
IHC-P		1/50 - 1/200. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
ICC/IF		Use a concentration of 0.25 - 2 µg/ml. Fixation/Permeabilization: PFA/Triton X-100.

Target

Function Multiubiquitin chain receptor involved in modulation of proteasomal degradation. Binds to polyubiquitin chains. Proposed to be capable to bind simultaneously to the 26S proteasome and to polyubiquitinated substrates and to deliver ubiquitinated proteins to the proteasome. May play a role in endoplasmatic reticulum-associated degradation (ERAD) of misfolded glycoproteins by association with PNGase and delivering deglycosylated proteins to the proteasome.
Involved in global genome nucleotide excision repair (GG-NER) by acting as component of the XPC complex. Cooperatively with CETN2 appears to stabilize XPC. May protect XPC from proteasomal degradation.
The XPC complex is proposed to represent the first factor bound at the sites of DNA damage and together with other core recognition factors, XPA, RPA and the TFIIH complex, is part of the pre-incision (or initial recognition) complex. The XPC complex recognizes a wide spectrum of damaged DNA characterized by distortions of the DNA helix such as single-stranded loops, mismatched bubbles or single stranded overhangs. The orientation of XPC complex binding appears to be crucial for inducing a productive NER. XPC complex is proposed to recognize and to interact with unpaired bases on the undamaged DNA strand which is followed by recruitment of the TFIIH complex and subsequent scanning for lesions in the opposite strand in a 5'-to-3' direction by the NER machinery. Cyclobutane pyrimidine dimers (CPDs) which are formed upon UV-induced DNA damage esacpe detection by the XPC complex due to a low degree of structural perurbation. Instead they are detected by the UV-DDB complex which in turn recruits and cooperates with the XPC complex in the respective DNA repair. In vitro, the XPC:RAD23B dimer is sufficient to initiate NER; it preferentially binds to cisplatin and UV-damaged double-stranded DNA and also binds to a variety of chemically and structurally diverse DNA adducts. XPC:RAD23B contacts DNA both 5' and 3' of a cisplatin lesion with a preference for the 5' side. XPC:RAD23B induces a bend in DNA upon binding. XPC:RAD23B stimulates the activity of DNA glycosylases TDG and SMUG1.

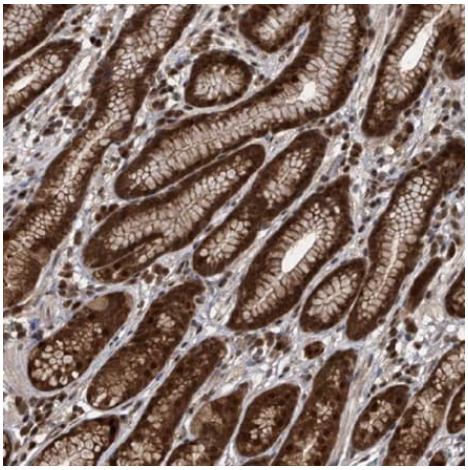
Sequence similarities Belongs to the RAD23 family.
Contains 1 STI1 domain.
Contains 2 UBA domains.
Contains 1 ubiquitin-like domain.

Domain The ubiquitin-like domain mediates interaction with ATXN3.

Cellular localization Nucleus. Cytoplasm. The intracellular distribution is cell cycle dependent. Localized to the nucleus and the cytoplasm during G1 phase. Nuclear levels decrease during S-phase; upon entering

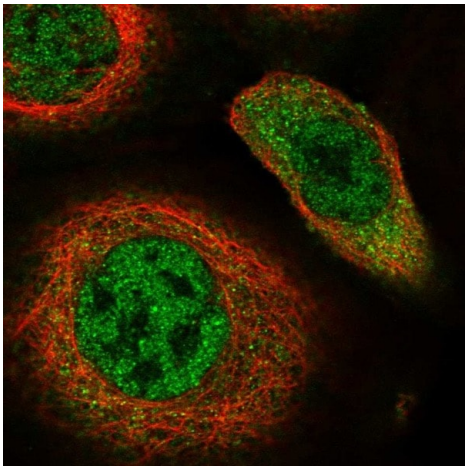
mitosis, relocalizes in the cytoplasm without association with chromatin.

Images



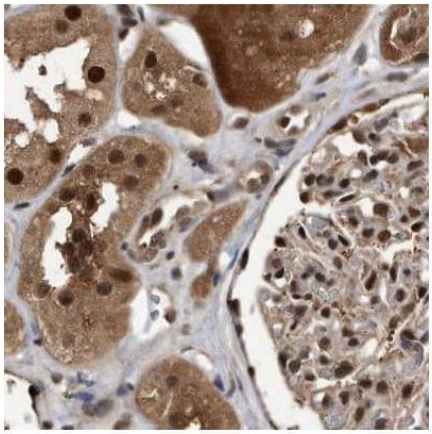
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-hHR23b antibody (ab223776)

Paraffin-embedded human stomach tissue stained for hHR23b using ab223776 at 1/50 dilution in immunohistochemical analysis.



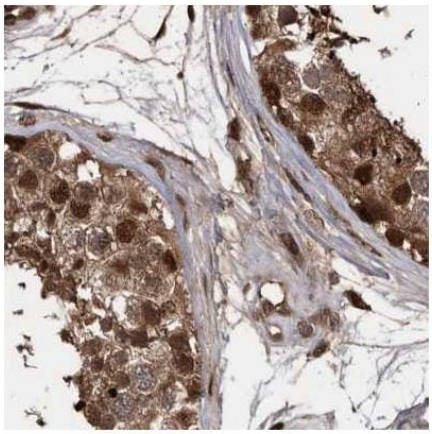
Immunocytochemistry/ Immunofluorescence - Anti-hHR23b antibody (ab223776)

PFA-fixed, Triton X-100 permeabilized A431 (human epidermoid carcinoma cell line) cells stained for hHR23b (green) using ab223776 at 4 µg/ml in ICC/IF.



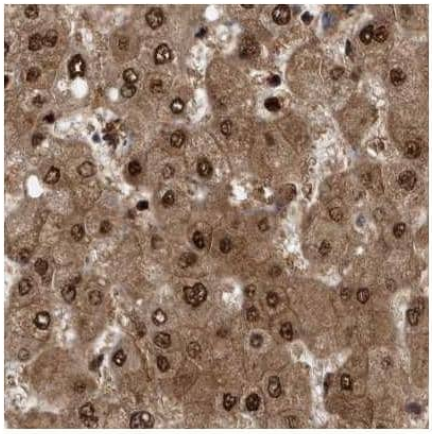
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-hHR23b antibody (ab223776)

Paraffin-embedded human kidney tissue stained for hHR23b using ab223776 at 1/50 dilution in immunohistochemical analysis.



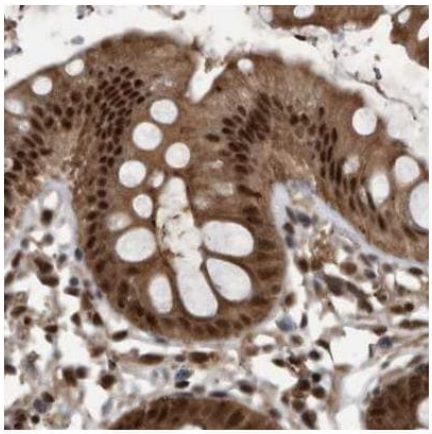
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-hHR23b antibody (ab223776)

Paraffin-embedded human testis tissue stained for hHR23b using ab223776 at 1/50 dilution in immunohistochemical analysis.



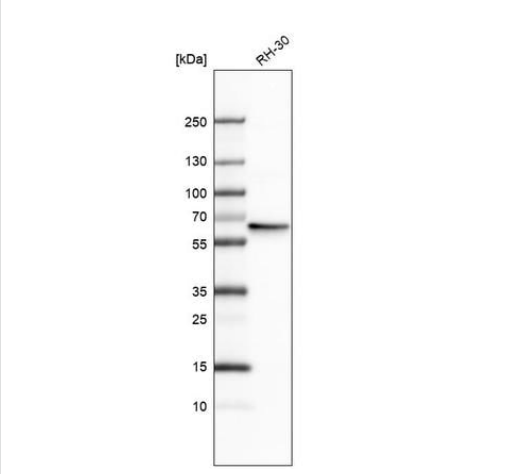
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-hHR23b antibody (ab223776)

Paraffin-embedded human liver tissue stained for hHR23b using ab223776 at 1/50 dilution in immunohistochemical analysis.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-hHR23b antibody (ab223776)

Paraffin-embedded human colon tissue stained for hHR23b using ab223776 at 1/50 dilution in immunohistochemical analysis.



Western blot - Anti-hHR23b antibody (ab223776)

Anti-hHR23b antibody (ab223776) at 1/100 dilution + RH-30 cell lysate

Predicted band size: 43 kDa

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