

Product datasheet

Anti-hHR23A antibody ab55725

3 References 3 Images

Overview

<b>Product name</b>	Anti-hHR23A antibody
<b>Description</b>	Mouse monoclonal to hHR23A
<b>Tested applications</b>	<b>Suitable for:</b> WB, IHC-P, ICC/IF, Flow Cyt
<b>Species reactivity</b>	<b>Reacts with:</b> Human
<b>Immunogen</b>	Recombinant fragment: EDAASTLVTG SEYETMLTEI MSMGYERERV VAALRASYNH PHRAVEYLLT GIPGSPEPEH GSVQESQVSE QPATEAAGEN PLEFLRDQPQ FQNMQRQVIQQ , corresponding to amino acids 151-250 of Human hHR23A <a href="#">Run BLAST with ExPASy</a> <a href="#">Run BLAST with NCBI</a>

General notes

Abcam is committed to meeting high standards of ethical manufacturing and as such, we will be discontinuing this product, which has been generated by the ascites method, within the next year. We are sorry for any inconvenience this may cause. If you would like help finding an alternative product, please do not hesitate to contact our scientific support team.

Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
<b>Storage buffer</b>	Preservative: None PBS, pH 7.2
<b>Purity</b>	Protein G purified
<b>Clonality</b>	Monoclonal
<b>Isotype</b>	IgG2a
<b>Light chain type</b>	kappa

Applications

Our [Abpromise guarantee](#) covers the use of **ab55725** 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 1 - 5 µg/ml.

Application	Abreviews	Notes
IHC-P		Use at an assay dependent concentration. PubMed: 22315970
ICC/IF		Use at an assay dependent concentration. PubMed: 22315970
Flow Cyt		Use 1µg for 10 <sup>6</sup> cells. <a href="#">ab170191</a> -Mouse monoclonal IgG2a, is suitable for use as an isotype control with this antibody.

## Target

### Function

Multiubiquitin chain receptor involved in modulation of proteasomal degradation. Binds to 'Lys-48'-linked polyubiquitin chains in a length-dependent manner and with a lower affinity to 'Lys-63'-linked 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.

Involved in nucleotide excision repair and is thought to be functional equivalent for RAD23B in global genome nucleotide excision repair (GG-NER) by association with XPC. In vitro, the XPC:RAD23A dimer has NER activity. Can stabilize XPC.

Involved in vpr-dependent replication of HIV-1 in non-proliferating cells and primary macrophages. Required for the association of HIV-1 vpr with the host proteasome.

### Sequence similarities

Belongs to the RAD23 family.

Contains 2 UBA domains.

Contains 1 ubiquitin-like domain.

### Domain

The ubiquitin-like domain mediates interaction with ATXN3.

The ubiquitin-like (UBL) and the UBA (ubiquitin-associated) domains interact intramolecularly in a highly dynamic manner, as each UBA domain competes for an overlapping UBL domain surface. Binding of ubiquitin or proteasome subunit PSMD4 disrupt the UBL-UBA domain interactions and drive RAD23A in to an open conformation.

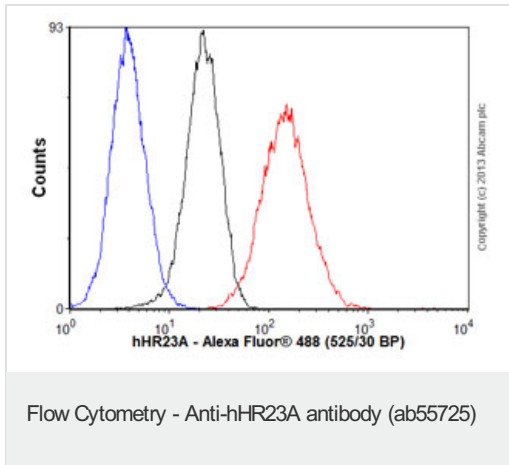
### Post-translational modifications

Phosphorylated upon DNA damage, probably by ATM or ATR.

### Cellular localization

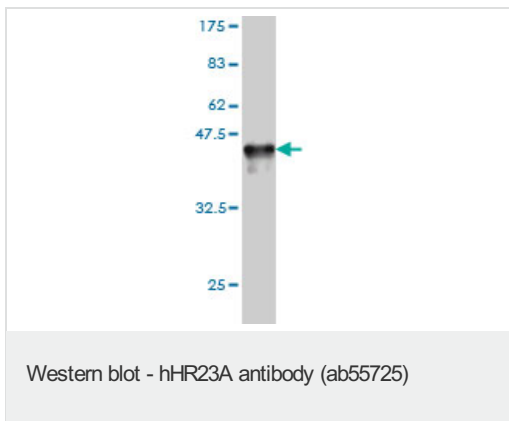
Nucleus.

## Anti-hHR23A antibody images



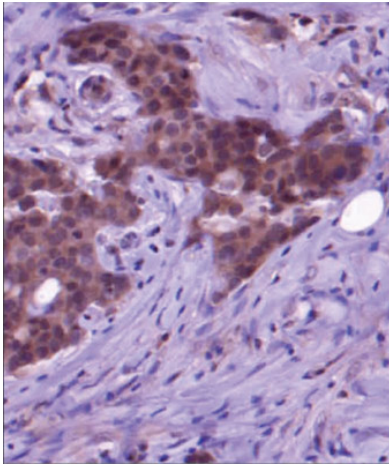
Flow Cytometry - Anti-hHR23A antibody (ab55725)

Overlay histogram showing HeLa cells stained with ab55725 (red line). The cells were fixed with 80% methanol (5 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 (ab55725, 1µg/1x10<sup>6</sup> cells) for 30 min at 22°C. The secondary antibody used was Alexa Fluor® 488 goat anti-mouse IgG (H&L) (ab150113) at 1/2000 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG2a [CIGG2A] (ab91361, 1µg/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.



Western blot - hHR23A antibody (ab55725)

Western blot against tagged recombinant protein immunogen using ab55725 hHR23A antibody at 1µg/ml. Predicted band size of immunogen is 37 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-hHR23A antibody (ab55725)

Image from Bacopulos S et al., *BMC Cancer*. 2012 Feb 8;12:63 Fig 3.; doi:10.1186/1471-2407-12-63; 8 February 2012, *BMC Cancer* 2012, 12:63

Immunohistochemical analysis of Human breast cancer tissue, staining hHR23A with ab55725.

Antigen retrieval was performed via pressure cooking slides in citrate buffer (pH 6.0). Tissue was blocked with normal goat serum for 1 hour at room temperature. Slides were incubated with primary antibodies overnight at 4°C. Secondary biotinylated antibodies were applied for 1 hour at room temperature and staining was detected using DAB.

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