# abcam

## Product datasheet

# Anti-HuR / ELAVL1 antibody [4C8] ab136542

# KO VALIDATED

## 12 References 3 Images

#### Overview

Product name Anti-HuR / ELAVL1 antibody [4C8]

**Description** Mouse monoclonal [4C8] to HuR / ELAVL1

Host species Mouse

Specificity ab136542 was specifically selected because of it's abiity to supershift HuR/mRNA

ribonucleoprotein complexes. ab136542 does not react with HuD, HuC, or Hel-N1.

Tested applications Suitable for: Flow Cyt, WB, EMSA

Species reactivity Reacts with: Human

**Immunogen** Synthetic peptide, corresponding to a region within HuR/ ELAVL1.

Positive control WB: SW480, HEK293 and HCT116 cell lysates. Flow Cyt: MCF7 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. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

Storage buffer Constituent: PBS

**Clonality** Monoclonal

Clone number 4C8
Isotype IgG1

#### **Applications**

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#### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab136542 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		Use 1µg for 10 <sup>6</sup> cells.  ab170190 - Mouse monoclonal lgG1, is suitable for use as an isotype control with this antibody.
WB		Use at an assay dependent concentration. Predicted molecular weight: 36 kDa.
EMSA		Use at an assay dependent concentration.

#### **Target**

Function Involved in 3'-UTR ARE-mediated MYC stabilization. Binds avidly to the AU-rich element in FOS

and IL3/interleukin-3 mRNAs. In the case of the FOS AU-rich element, HUR binds to a core

element of 27 nucleotides that contain AUUUA, AUUUUA and AUUUUUA motifs.

Tissue specificity Ubiquitous.

**Sequence similarities** Belongs to the RRM elav family.

Contains 3 RRM (RNA recognition motif) domains.

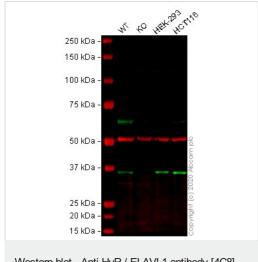
Post-translational

modifications

Methylated at Arg-217 by CARM1 in macrophages in response to LPS challenge.

Cellular localization Cytoplasm.

#### **Images**



Western blot - Anti-HuR / ELAVL1 antibody [4C8] (ab136542)

**All lanes :** Anti-HuR / ELAVL1 antibody [4C8] (ab136542) at 1 μg/ml

Lane 1 : Wild-type SW480 (Human colorectal adenocarcinoma cell

line) whole cell lysate at 40 µg

**Lane 2**: ELAVL1 knockout SW480 (Human colorectal adenocarcinoma cell line) whole cell lysate at 40 μg

Lane 3: HEK-293 (Human epithelial cell line from embryonic

kidney) whole cell lysate at 20 µg

Lane 4: HCT 116 (Human colorectal carcinoma cell line) whole cell

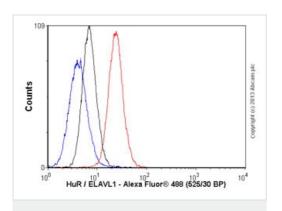
lysate at 20 µg

Performed under reducing conditions.

**Predicted band size:** 36 kDa **Observed band size:** 36 kDa

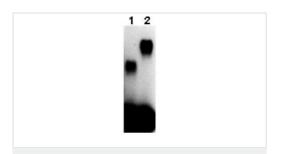
**Lanes 1 - 4:** Merged signal (red and green). Green - ab136542 observed at 36 kDa. Red - loading control, <u>ab52866</u> (Rabbit antialpha Tubulin antibody [EP1332Y]) observed at 55kDa.

ab136542 was shown to react with ELAVL1 in wild-type SW480 cells in western blot. Loss of signal was observed when ELAVL1 knockout sample was used. Wild-type and ELAVL1 knockout SW480 cell lysates were subjected to SDS-PAGE. Membranes were blocked in 5% milk in TBS-T (0.1% Tween®) before incubation with ab136542 and <a href="mailto:ab52866">ab52866</a> (Rabbit anti-alpha Tubulin antibody [EP1332Y]) overnight at 4°C at 1 µg/ml and a 1 in 20000 dilution respectively. Blots were incubated with Goat anti-Mouse lgG H&L (IRDye® 800CW) preabsorbed (ab216772) and Goat anti-Rabbit lgG H&L (IRDye® 680RD) preabsorbed (ab216777) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Flow Cytometry - Anti-HuR / ELAVL1 antibody [4C8] (ab136542)

Overlay histogram showing MCF7 cells stained with ab136542 (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 (ab136542, 1µg/1x10 $^6$  cells) for 30 min at 22°C. The secondary antibody used was Alexa Fluor® 488 goat anti-mouse lgG (H&L) (ab150113) at 1/2000 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse lgG1 [ICIGG1] (ab91353, 1µg/1x10 $^6$  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.



Electrophoretic Mobility Shift Assay - Anti-HuR / ELAVL1 antibody [4C8] (ab136542)

Electrophoretic Mobility Shift Assay of HuR/mRNA complex (Lane 1). The complex is significantly supershifted by the addition of 10ng of ab136542 (Lane 2).

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

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