

Anti-HuR / ELAVL1 Monoclonal Antibody

Catalog # ABO14575

Specification

Anti-HuR / ELAVL1 Monoclonal Antibody - Product Information

Application Primary Accession Host Isotype Reactivity Clonality Format **Description** Anti-HuR / ELAVL1 Mono WB, IHC, IF, ICC, IP, FC <u>015717</u> Rabbit Rabbit IgG Rat, Human, Mouse Monoclonal Liquid

Anti-HuR / ELAVL1 Monoclonal Antibody . Tested in WB, IHC, ICC/IF, IP, Flow Cytometry applications. This antibody reacts with Human, Mouse, Rat.

Anti-HuR / ELAVL1 Monoclonal Antibody - Additional Information

Gene ID 1994

Other Names ELAV-like protein 1, Hu-antigen R, HuR, ELAVL1, HUR

Application Details WB 1:500-1:1000
IHC 1:50-1:200
ICC/IF 1:50-1:200
IP 1:40
FC 1:50

Contents Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

Immunogen A synthesized peptide derived from human HuR / ELAVL1

Purification Affinity-chromatography

Storage

Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

Anti-HuR / ELAVL1 Monoclonal Antibody - Protein Information

Name ELAVL1

Synonyms HUR

Function



RNA-binding protein that binds to the 3'-UTR region of mRNAs and increases their stability (PubMed:14517288, PubMed:18285462, PubMed:31358969). Involved in embryonic stem cell (ESC) differentiation: preferentially binds mRNAs that are not methylated by N6-methyladenosine (m6A), stabilizing them, promoting ESC differentiation (By similarity). Has also been shown to be capable of binding to m6A-containing mRNAs and contributes to MYC stability by binding to m6A-containing MYC mRNAs (PubMed:32245947). Binds to poly-U elements and AU-rich elements (AREs) in the 3'-UTR of target mRNAs (PubMed:14731398, PubMed:17632515, PubMed:18285462, PubMed:23519412, PubMed:8626503). Binds avidly to the AU-rich element in FOS and IL3/interleukin-3 mRNAs. In the case of the FOS AU-rich element, binds to a core element of 27 nucleotides that contain AUUUA, AUUUUA, and AUUUUUA motifs. Binds preferentially to the 5'-UUUU[AG]UUU-3' motif in vitro (PubMed: 8626503). With ZNF385A, binds the 3'-UTR of p53/TP53 mRNA to control their nuclear export induced by CDKN2A. Hence, may regulate p53/TP53 expression and mediate in part the CDKN2A anti-proliferative activity. May also bind with ZNF385A the CCNB1 mRNA (By similarity). Increases the stability of the leptin mRNA harboring an AU-rich element (ARE) in its 3' UTR (PubMed:29180010).

Cellular Location

Cytoplasm. Nucleus. Cytoplasm, Stress granule {ECO:0000250|UniProtKB:P70372}. Cytoplasm, P-body. Note=Translocates into the cytoplasm following phosphorylation by MAPKAPK2 (PubMed:14517288). Likewise, phosphorylation by PRKCD promotes translocation from the nucleus into the cytoplasm, where it is associated with free and cytoskeleton-bound polysomes (PubMed:18285462). Localizes to the stress granules in the presence of PLEKHN1 (By similarity). {ECO:0000250|UniProtKB:P70372, ECO:0000269|PubMed:14517288, ECO:0000269|PubMed:18285462}

Tissue Location

Ubiquitous. Detected in brain, liver, thymus and muscle.

Anti-HuR / ELAVL1 Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-HuR / ELAVL1 Monoclonal Antibody - Images





Figure 1. Western blot analysis of ELAVL1 using anti-ELAVL1 antibody (M00736).

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human Jurkat whole cell lysates,

Lane 2: human Hela whole cell lysates,

Lane 3: human MOLT-4 whole cell lysates,

Lane 4: human HepG2 whole cell lysates,

Lane 5: rat heart tissue lysates,

Lane 6: rat spleen tissue lysates,

Lane 7: mouse heart tissue lysates,

Lane 8: mouse spleen tissue lysates.

After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-ELAVL1 antigen affinity purified monoclonal antibody (Catalog # M00736) at 1:500 overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:500 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for ELAVL1 at approximately 36 kDa. The expected band size for ELAVL1 is at 36 kDa.