

LARP1 (A-8): sc-515873

BACKGROUND

La-related protein 1 (LARP1), also known as KIAA0731, is a 1,096 amino acid protein belonging to the LARP family. LARP1 contains two conserved regions, one that shares homology with La/SSB proteins and one that is conserved only across LARP family proteins. Within the La/SSB conserved region, LARP1 contains a HTH La-type RNA-binding domain, which may indicate a role in RNA stabilization and folding. Upon DNA damage, LARP1 is phosphorylated by ATR or ATM. LARP1 interacts with many signaling intermediate proteins, including 14-3-3 β , 14-3-3 γ , 14-3-3 θ and 14-3-3. Widely expressed, LARP1 levels are highest in heart. LARP1 exists as three isoforms produced by alternative splicing.

CHROMOSOMAL LOCATION

Genetic locus: LARP1 (human) mapping to 5q33.2; Larp1 (mouse) mapping to 11 B1.3.

SOURCE

LARP1 (A-8) is a mouse monoclonal antibody raised against amino acids 179-250 mapping near the N-terminus of LARP1 of human origin.

PRODUCT

Each vial contains 200 μ g IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

LARP1 (A-8) is available conjugated to agarose (sc-515873 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-515873 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-515873 PE), fluorescein (sc-515873 FITC), Alexa Fluor[®] 488 (sc-515873 AF488), Alexa Fluor[®] 546 (sc-515873 AF546), Alexa Fluor[®] 594 (sc-515873 AF594) or Alexa Fluor[®] 647 (sc-515873 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-515873 AF680) or Alexa Fluor[®] 790 (sc-515873 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

LARP1 (A-8) is recommended for detection of LARP1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for LARP1 siRNA (h): sc-91848, LARP1 siRNA (m): sc-146649, LARP1 shRNA Plasmid (h): sc-91848-SH, LARP1 shRNA Plasmid (m): sc-146649-SH, LARP1 shRNA (h) Lentiviral Particles: sc-91848-V and LARP1 shRNA (m) Lentiviral Particles: sc-146649-V.

Molecular Weight of LARP1: 123 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227, Ramos cell lysate: sc-2216 or MDA-MB-231 cell lysate: sc-2232.

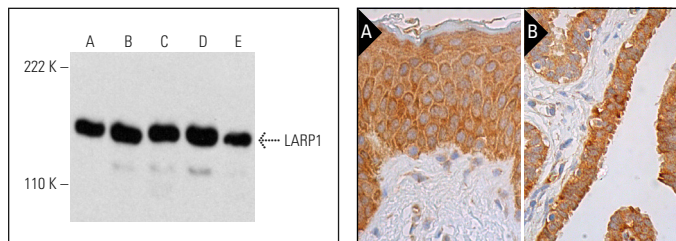
RESEARCH USE

For research use only, not for use in diagnostic procedures.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

DATA



LARP1 (A-8): sc-515873. Western blot analysis of LARP1 expression in HeLa (A), MDA-MB-231 (B), COLO 320DM (C), Ramos (D) and Hep G2 (E) whole cell lysates.

LARP1 (A-8): sc-515873. Immunoperoxidase staining of formalin fixed, paraffin-embedded human skin tissue showing cytoplasmic staining of keratinocytes, fibroblasts, Langerhans cells and melanocytes (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human fallopian tube tissue showing cytoplasmic staining of glandular cells (B).

SELECT PRODUCT CITATIONS

- Hildebrandt, A., et al. 2019. The RNA-binding ubiquitin ligase MKRN1 functions in ribosome-associated quality control of poly(A) translation. *Genome Biol.* 20: 216.
- Zhang, B., et al. 2019. The Ibr-7 derivative of ibrutinib exhibits enhanced cytotoxicity against non-small cell lung cancer cells via targeting of mTORC1/S6 signaling. *Mol. Oncol.* 13: 946-958.
- Kim, B., et al. 2020. Discovery of widespread host protein interactions with the pre-replicated genome of CHIKV using VIR-CLASP. *Mol. Cell* 78: 624-640.
- Wu, S., et al. 2020. A novel micropeptide encoded by Y-linked LINC00278 links cigarette smoking and AR signaling in male esophageal squamous cell carcinoma. *Cancer Res.* 80: 2790-2803.
- Feng, J., et al. 2022. AKAP1 contributes to impaired mtDNA replication and mitochondrial dysfunction in podocytes of diabetic kidney disease. *Int. J. Biol. Sci.* 18: 4026-4042.
- Farooq, Z., et al. 2022. The amino acid sensor GCN2 suppresses Terminal Oligopyrimidine (TOP) mRNA translation via La-related Protein 1 (LARP1). *J. Biol. Chem.* E-published.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

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