

ALR (V-16): sc-51257

BACKGROUND

ALR (augmenter of liver regeneration), also called Erv1-like growth factor, hepatopoietin (HPO) or hepatic regenerative stimulation substance (HSS), is a hepatotrophic growth factor and flavin-linked sulfhydryl oxidase expressed in various tissues. ALR exists as a homodimer and belongs to the Erv1/ALR family of proteins. This family can be found in higher and lower eukaryotes. ALR has two forms: a cytosolic form and a nuclear form. The nuclear form regulates the transcriptional activity of AP-1. The cytosolic form plays a role in the biogenesis of Fe/S proteins and contributes to cellular iron homeostasis. In addition, ALR induces the expression of S-adenosylmethionine decarboxylase and ornithine decarboxylase (ODC), which each play an important role in the synthesis of polyamines. Through stimulation of polyamine synthesis, ALR heavily contributes to the regulation of the different stages of liver regeneration.

REFERENCES

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3. Tury, A., et al. 2005. Expression of the sulfhydryl oxidase ALR (augmenter of liver regeneration) in adult rat brain. *Brain Res.* 1048: 87-97.
4. Li, Q., et al. 2005. Effects of augmentation of liver regeneration recombinant plasmid on rat hepatic fibrosis. *World J. Gastroenterol.* 11: 2438-2443.
5. Zhang, L.M., et al. 2005. Effect of naked eukaryotic expression plasmid encoding rat augmenter of liver regeneration on acute hepatic injury and hepatic failure in rats. *World J. Gastroenterol.* 11: 3680-3685.
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7. Dayoub, R., et al. 2006. Regulation of polyamine synthesis in human hepatocytes by hepatotrophic factor augmenter of liver regeneration. *Biochem. Biophys. Res. Commun.* 345: 181-187.
8. Gatzidou, E., et al. 2006. Insights on augmenter of liver regeneration cloning and function. *World J. Gastroenterol.* 12: 4951-4958.

CHROMOSOMAL LOCATION

Genetic locus: GFER (human) mapping to 16p13.3; Gfer (mouse) mapping to 17 A3.3.

SOURCE

ALR (V-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of ALR of human origin.

STORAGE

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

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-51257 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ALR (V-16) is recommended for detection of ALR of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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).

ALR (V-16) is also recommended for detection of ALR in additional species, including equine, canine, bovine and porcine.

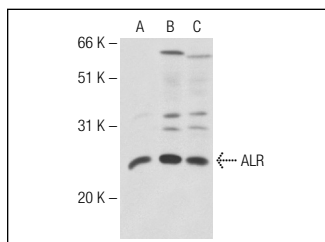
Suitable for use as control antibody for ALR siRNA (h): sc-72224, ALR siRNA (m): sc-72225, ALR shRNA Plasmid (h): sc-72224-SH, ALR shRNA Plasmid (m): sc-72225-SH, ALR shRNA (h) Lentiviral Particles: sc-72224-V and ALR shRNA (m) Lentiviral Particles: sc-72225-V.

Molecular Weight of ALR nuclear isoform: 15 kDa.

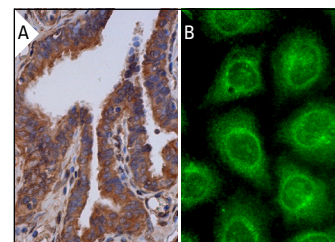
Molecular Weight of ALR cytoplasmic isoform: 23 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227, mouse liver extract: sc-2256 or rat liver extract: sc-2395.

DATA



ALR (V-16): sc-51257. Western blot analysis of ALR expression in Hep G2 whole cell lysate (A) and rat liver (B) and mouse liver (C) tissue extracts.



ALR (V-16): sc-51257. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human fallopian tube tissue showing cytoplasmic staining of glandular cells (B).

RESEARCH USE

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



Try **ALR (E-7): sc-365885** or **ALR (C-3): sc-365886**, our highly recommended monoclonal alternatives to ALR (V-16).