

ALR (FL-205): sc-134869

BACKGROUND

ALR (augmenter of liver regeneration), also called Erv1-like growth factor, hepatopoietin (HPO) or hepatic regenerative stimulation substance (HSS), is a hepatotropic 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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- Kay, C.W., et al. 2006. Determination of the distance between the two neutral flavin radicals in augmenter of liver regeneration by pulsed ELDOR. *J. Am. Chem. Soc.* 128: 76-77.

CHROMOSOMAL LOCATION

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

SOURCE

ALR (FL-205) is a rabbit polyclonal antibody raised against amino acids 1-205 representing full length ALR of human origin.

PRODUCT

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

APPLICATIONS

ALR (FL-205) 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

ALR (FL-205) is also recommended for detection of ALR in additional species, including canine 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 nuclear ALR: 15 kDa.

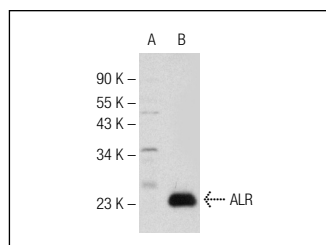
Molecular Weight of cytoplasmic ALR: 23 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227, rat liver extract: sc-2395 or ALR (m): 293T Lysate: sc-118366.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



ALR (FL-205): sc-134869. Western blot analysis of ALR expression in non-transfected: sc-117752 (A) and mouse ALR transfected: sc-118366 (B) 293T whole cell lysates.

STORAGE

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

RESEARCH USE

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