

ALR (m): 293T Lysate: sc-118366

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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2. Mathews, C.E., Suarez-Pinzon, W.L., Baust, J.J., Strynadka, K., Leiter, E.H. and Rabinovitch, A. 2005. Mechanisms underlying resistance of pancreatic islets from ALR/Lt mice to cytokine-induced destruction. *J. Immunol.* 175: 1248-1256.
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5. Zhang, L.M., Liu, D.W., Liu, J.B., Zhang, X.L., Wang, X.B., Tang, L.M. and Wang, L.Q. 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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CHROMOSOMAL LOCATION

Genetic locus: Gfer (mouse) mapping to 17 A3.3.

PRODUCT

ALR (m): 293T Lysate represents a lysate of mouse ALR transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

APPLICATIONS

ALR (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive ALR antibodies. Recommended use: 10-20 µl per lane.

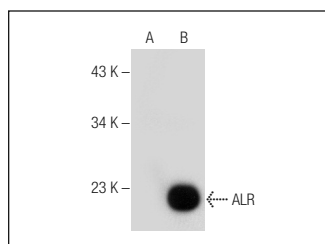
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

ALR (E-7): sc-365885 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse ALR expression in ALR transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

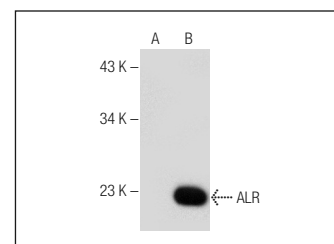
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



ALR (E-7): sc-365885. Western blot analysis of ALR expression in non-transfected: sc-117752 (A) and mouse ALR transfected: sc-118366 (B) 293T whole cell lysates.



ALR (C-3): sc-365886. Western blot analysis of ALR expression in non-transfected: sc-117752 (A) and mouse ALR transfected: sc-118366 (B) 293T whole cell lysates.

RESEARCH USE

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

PROTOCOLS

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