

Datasheet for 210-301-C32S**Esrp-2 Antibody****Overview**

Description:	Anti-Esrp-2 (MOUSE) Monoclonal Antibody - 210-301-C32S
Item No.:	210-301-C32S
Size:	25 µL
Applications:	ELISA, WB
Reactivity:	Mouse
Host Species:	Mouse

Product Details

Background:	Epithelial splicing regulatory protein 2 (Esrp-2) is an mRNA splicing factor that regulates the formation of epithelial cell-specific isoforms. It specifically regulates the expression of FGFR2-IIIb, an epithelial cell-specific isoform of FGFR2, and also regulates the splicing of CD44, CTNND1, ENAH, 3 transcripts that undergo changes in splicing during the epithelial-to-mesenchymal transition (EMT). Esrp-2 acts by directly binding specific sequences in mRNAs. It binds the GU-rich sequence motifs in the ISE/ISS-3, a cis-element regulatory region present in the mRNA of FGFR2.
Synonyms:	mouse anti-Esrp2 antibody, mouse anti-Esrp-2 antibody, RNA-binding protein 35B, RNA-binding motif protein 35B
Host Species:	Mouse
Clonality:	Monoclonal
Clone ID:	22C5.H7.A6
Format:	IgG2a

Target Details

Gene Name:	Esrp2
Reactivity:	Mouse
Immunogen Type:	Recombinant Protein

Immunogen:	Anti-Esrp-2 is produced by repeated immunizations of full length recombinant mouse Esrp-2 fusion protein.
Purity/Specificity:	This product is an IgG fraction antibody purified from tissue culture supernatant by Protein-A chromatography followed by extensive dialysis against the buffer stated above. This antibody reacts with mouse Esrp-2 protein. A BLAST analysis was used to suggest cross-reactivity with Esrp-2 from mouse based on a 100% homology with the immunizing sequence. Cross-reactivity with Esrp-2 from other sources has not been determined.
Relevant Links:	• UniProtKB - Q8K0G8 • NCBI - NP_789808.1 • GeneID - 77411

Application Details

Tested Applications:	ELISA, WB
Application Note:	Anti-Esrp-2 protein A purified antibody has been tested for use western blotting and ELISA. This antibody shows specific reactivity by with ESRP2 transfected cell lysates. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 77.4 kDa in size corresponding to Esrp-2 by western blotting in the appropriate cell lysate or extract. The antibody shows bands at ~77kD and 70kD and no reactivity is observed in cells transfected with GFP or ESRP1. A starting dilution of 1:1000 is suggested for western blotting.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:100,000
WB:	1:1000

Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1.0 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None

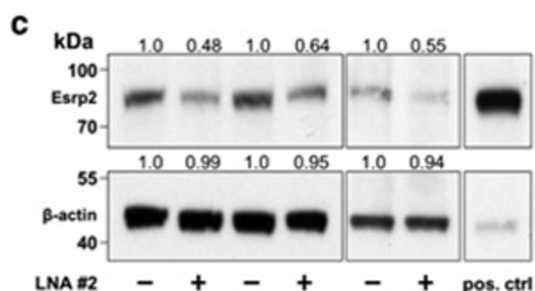
Shipping & Handling

Shipping Condition:	Dry Ice
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Storage Condition: Store vial at -20° C or below prior to opening. This vial contains a relatively low volume of reagent (25 µL). To minimize loss of volume dilute 1:10 by adding 225 µL of the buffer stated above directly to the vial. Recap, mix thoroughly and briefly centrifuge to collect the volume at the bottom of the vial. Use this intermediate dilution when calculating final dilutions as recommended below. Store the vial at -20°C or below after dilution. Avoid cycles of freezing and thawing.

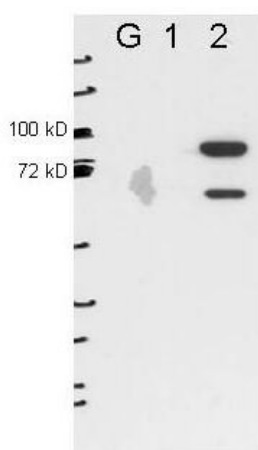
Expiration: Expiration date is three (3) months from date of receipt.

Images



Western Blot

Knockdown of Esrp2-as reduces Esrp2 protein levels, globally alters expression of genes involved in cellular motility and inhibits cell proliferation. (c) Esrp2 protein expression in the M6 cell line 72 h after knockdown of Esrp2-as with LNA#2. M27H4 cells stably overexpressing Esrp2 were used as a positive control (pos. ctrl). Band intensities were normalized to β-actin levels and are semi-quantitatively evaluated relative to the negative control using TINA v2.09. Depicted is the mean±SD of three independent experiments. Statistical significance was assessed using a one-sample t-test with the neg. control set to 1.0, with *P < 0.05. Fig 5. PMID: 28759043



Western Blot

Anti-ESRP2 by western blot shows detection of ESRP2 in lane 2. Lane G: GFP-transfected-293T cell extract, Lane 1: ESRP1-transfected 293T cell extract, Lane 2: ESRP2-transfected 293T cell extract. Briefly, each lane contains approximately 5 µg of lysate. Primary antibody was used at a 1:1000 dilution (PBS-T plus milk) and reacted for O/N at 4C. The membrane was washed and reacted with a 1:10,000 dilution of an anti-mouse ECL antibody for 1hr at room temperature. The bands shown are full length FLAG-ESRP2 (~80kDa) and a slightly lower band that is specific to ESRP2. Molecular weight estimation was made by comparison to prestained MW markers.

References

- Heilmann et al. Genome-wide screen for differentially methylated long noncoding RNAs identifies Esrp2 and lncRNA Esrp2-as regulated by enhancer DNA methylation with prognostic relevance for human breast cancer. *Oncogene* (2017)

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.