

Anti-Esrp-1 (MOUSE) Monoclonal Antibody

Esrp-1 Antibody Catalog # ASR4991

Specification

Anti-Esrp-1 (MOUSE) Monoclonal Antibody - Product Information

Host Conjugate Target Species Reactivity Clonality Application Application Note	Mouse Unconjugated Mouse Mouse Monoclonal WB, E, I, LCI This protein-A purified antibody has been tested for use western blotting. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 75.5 kDa in size corresponding to Esrp-1 by western blotting in the appropriate cell lysate or extract.
Physical State Buffer	Liquid (sterile filtered) 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Immunogen	Anti-Esrp-1 was produced by repeated immunizations of full length recombinant mouse Esrp-1 fusion protein.
Preservative	0.01% (w/v) Sodium Azide

Anti-Esrp-1 (MOUSE) Monoclonal Antibody - Additional Information

Gene ID 207920

Other Names 207920

Purity

This product is an IgG fraction antibody purified by Protein-A chromatography followed by extensive dialysis against the buffer stated above. This antibody reacts with mouse Esrp-1 protein. A BLAST analysis of the immunizing protein sequence shows 100% homology with Esrp-1 from mouse and a 91% sequence homology with Esrp-1 from human, pig, rat, opossum, horse, cattle, panda, dog, and chimpanzee. The binding epitope of this monoclonal antibody has not been mapped.

Storage Condition

Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

Precautions Note



This product is for research use only and is not intended for therapeutic or diagnostic applications.

Anti-Esrp-1 (MOUSE) Monoclonal Antibody - Protein Information

Name Esrp1

Synonyms Rbm35a

Function

mRNA splicing factor that regulates the formation of epithelial cell-specific isoforms. Specifically regulates the expression of FGFR2-IIIb, an epithelial cell-specific isoform of FGFR2. Also regulates the splicing of CD44, CTNND1, ENAH, 3 transcripts that undergo changes in splicing during the epithelial-to-mesenchymal transition (EMT). Acts by directly binding specific sequences in mRNAs. Binds the GU-rich sequence motifs in the ISE/ISS-3, a cis-element regulatory region present in the mRNA of FGFR2 (By similarity). Regulates splicing and expression of genes involved in inner ear development, auditory hair cell differentiation, and cell fate specification in the cochlear epithelium (PubMed:>29107558).

Cellular Location Nucleus.

Tissue Location

Epithelial cell-specific. Epithelial-specific expression in diverse tissues and organs with particularly notable levels of expression in skin and gastrointestinal epithelia

Anti-Esrp-1 (MOUSE) Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-Esrp-1 (MOUSE) Monoclonal Antibody - Images



Anti-ESRP-1 by western blot shows detection of ESRP-1 seen in lane 2. Lane 1: GFP-transfected-293T cell extracts, Lane 2: ESRP-1-transfected-293T cell extracts, Lane 3: ESRP2-transfected 293T cell lysates. Briefly, each lane contains approximately 5 μ g of lysate. Primary antibody was used at a 1:1000 dilution in PBS-T plus milk, and reacted for 1hr at room temperature. The membrane was washed and reacted with a 1:10,000 dilution of an anti-mouse ECL antibody for 1hr at room temperature. Molecular weight estimation was made by comparison to prestained MW markers.

Anti-Esrp-1 (MOUSE) Monoclonal Antibody - Background

Epithelial splicing regulatory protein 1 (Esrp-1) 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). EsrpP-1 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.