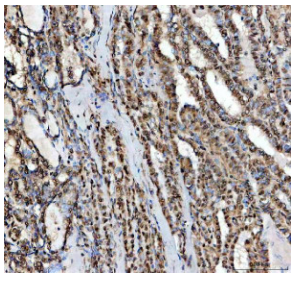
EWSR1 Antibody / RNA Binding Protein Antibody (R32181)

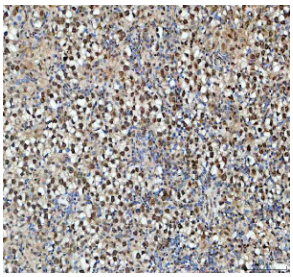
Catalog No.	Formulation	Size
R32181	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

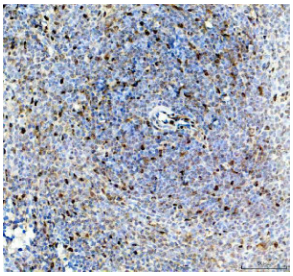
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	Q01844
Localization	Nuclear
Applications	Western Blot : 0.5-1ug/ml Immunohistochemistry (FFPE) : 2-5ug/ml Immunofluorescence (FFPE) : 5ug/ml Flow Cytometry : 1-3ug/million cells
Limitations	This EWSR1 Antibody / RNA Binding Protein Antibody is available for research use only.



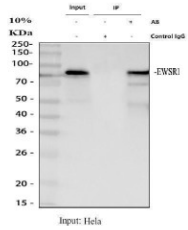
EWSR1 Antibody Human Thyroid Cancer IHC. Immunohistochemical analysis of FFPE human thyroid cancer tissue following heat-induced epitope retrieval in pH8 EDTA buffer. Tissue sections were incubated with EWSR1 Antibody at 2 ug/ml overnight, followed by an HRP-conjugated secondary antibody and DAB chromogen for detection. Strong predominantly nuclear staining is observed throughout the neoplastic epithelial cells, consistent with the established nuclear localization of EWSR1 in transcriptional regulation and RNA processing. This staining pattern demonstrates that this EWSR1 Antibody, an RNA Binding Protein Antibody, is suitable for detecting endogenous EWSR1 expression in human FFPE thyroid cancer tissue by immunohistochemistry.



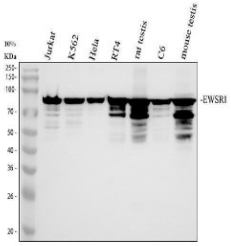
EWSR1 Antibody Human Testis Cancer IHC. Immunohistochemical analysis of FFPE human testis cancer tissue following heat-induced epitope retrieval in pH8 EDTA buffer. Tissue sections were incubated with EWSR1 Antibody at 2 ug/ml overnight, followed by an HRP-conjugated secondary antibody and DAB chromogen for visualization. Distinct nuclear staining is observed in the majority of tumor cells, consistent with the predominantly nuclear localization of EWSR1 as an RNA-binding protein involved in transcriptional regulation and RNA processing. This staining pattern demonstrates that this EWSR1 Antibody, an RNA Binding Protein Antibody, is suitable for detecting endogenous EWSR1 expression in human FFPE tissue by immunohistochemistry.



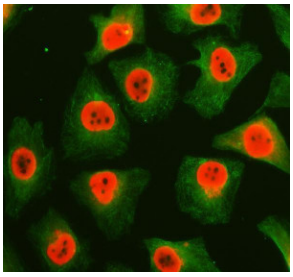
EWSR1 Antibody Rat Spleen IHC. Immunohistochemical analysis of FFPE rat spleen tissue following heat-induced epitope retrieval in pH8 EDTA buffer. Tissue sections were incubated with EWSR1 Antibody at 2 ug/ml overnight, followed by an HRP-conjugated secondary antibody and DAB chromogen for visualization. Moderate nuclear staining is observed throughout splenic cells, consistent with the widespread expression and predominantly nuclear localization of EWSR1 in transcriptional regulation and RNA processing. This staining pattern demonstrates that this EWSR1 Antibody, an RNA Binding Protein Antibody, is suitable for detecting endogenous EWSR1 in rat FFPE tissue by immunohistochemistry.



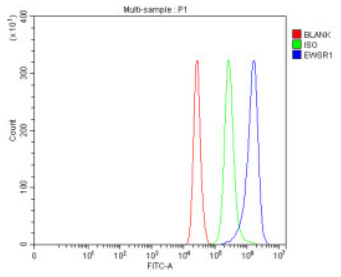
EWSR1 Antibody HeLa Cell IP. Immunoprecipitation of endogenous EWSR1 from HeLa whole cell lysate was performed using EWSR1 Antibody, followed by Western blot detection with the same antibody. Lane 1: HeLa input lysate (30 ug). Lane 2: rabbit IgG immunoprecipitation negative control. Lane 3: EWSR1 immunoprecipitated from 500 ug of HeLa lysate using 2 ug of EWSR1 Antibody. A distinct band is detected at approximately 90-95 kDa in the input and EWSR1 immunoprecipitation lanes, while no corresponding signal is observed in the IgG control. Although the predicted molecular weight of EWSR1 is approximately 69 kDa, the protein commonly migrates at a higher apparent molecular weight due to its intrinsically disordered regions. These results demonstrate that this EWSR1 Antibody, an RNA Binding Protein Antibody, efficiently immunoprecipitates endogenous EWSR1 for downstream protein interaction and molecular biology studies.



EWSR1 Antibody Human, Mouse and Rat Cell WB. Western blot analysis of EWSR1 was performed using lysates from human Jurkat, K562, HeLa, and RT4 cells, rat testis and C6 cells, and mouse testis. A prominent immunoreactive band is detected at approximately 90-95 kDa in all samples, with additional lower molecular weight bands visible in several lanes, particularly the testis lysates. Although the predicted molecular weight of EWSR1 is approximately 69 kDa, EWSR1 commonly migrates at a higher apparent molecular weight due to its amino acid composition and extensive intrinsically disordered regions, which alter electrophoretic mobility. These results demonstrate that this EWSR1 Antibody, an RNA Binding Protein Antibody, consistently detects endogenous EWSR1 across multiple human and rodent cell and tissue lysates by Western blot.



EWSR1 Antibody HeLa Cell IF. Immunofluorescence analysis of HeLa cells following enzymatic antigen retrieval. Cells were incubated with EWSR1 Antibody at 5 ug/ml together with a Tubulin Alpha antibody, followed by fluorophore-conjugated secondary antibodies. EWSR1 is shown in green and Tubulin Alpha in red. EWSR1 staining is observed predominantly within the nucleus, with weaker diffuse cytoplasmic signal, consistent with its established role as an RNA-binding protein involved in transcriptional regulation and RNA processing. This localization demonstrates that this EWSR1 Antibody, an RNA Binding Protein Antibody, is suitable for visualizing endogenous EWSR1 expression and subcellular distribution in cultured cells by immunofluorescence.



EWSR1 Antibody RT4 Cell FACS. Flow cytometric analysis of fixed and permeabilized RT4 cells using EWSR1 Antibody at 1 ug/10^6 cells, followed by a Fluoro488-conjugated secondary antibody. The blue histogram represents EWSR1 staining, the green histogram represents the rabbit IgG isotype control, and the red histogram represents the unstained blank control. A pronounced rightward shift of the EWSR1-stained population relative to both controls demonstrates specific intracellular detection of endogenous EWSR1. These results show that this EWSR1 Antibody, an RNA Binding Protein Antibody, is suitable for flow cytometric analysis of EWSR1 expression in cultured cells.

Description

EWSR1 Antibody / RNA Binding Protein Antibody recognizes EWSR1, a multifunctional RNA-binding protein belonging to the FET family of nucleic acid-binding proteins, which also includes FUS and TAF15. EWSR1 participates in numerous aspects of gene expression by coupling transcription with RNA processing, transport, and maturation. The protein contains an amino-terminal transcriptional activation domain and a carboxyl-terminal RNA-binding domain, allowing it to interact with both transcriptional machinery and RNA molecules. EWSR1 is expressed in many tissues and is predominantly localized within the nucleus under normal physiological conditions. A EWSR1 Antibody is widely used to investigate transcriptional regulation, RNA metabolism, DNA repair, and mechanisms governing cellular homeostasis.

EWSR1 serves as an important regulator of RNA biology through interactions with RNA polymerase II, splicing factors, transcription factors, and numerous RNA-binding proteins. It contributes to transcriptional activation, alternative RNA splicing, messenger RNA transport, and maintenance of genome stability following DNA damage. More recently, EWSR1 has also been implicated in biomolecular condensate formation through liquid-liquid phase separation, a process that helps organize nuclear functions and regulate gene expression. Because of these diverse activities, EWSR1 has become an important model for understanding how transcription and RNA processing are coordinated within the cell. A EWSR1 Antibody provides researchers with a valuable tool for investigating these interconnected molecular pathways.

EWSR1 is best known clinically because chromosomal translocations involving the gene generate oncogenic fusion proteins that drive multiple human sarcomas and related malignancies. The most common fusion, EWSR1-FLI1, is the defining molecular alteration in Ewing sarcoma, while additional fusion partners have been identified in desmoplastic small round cell tumor, myxoid liposarcoma, clear cell sarcoma, extraskeletal myxoid chondrosarcoma, and several other neoplasms. Beyond oncology, EWSR1 has been linked to neurodegenerative disease, cellular stress responses, and DNA damage repair through its normal physiological functions. Consequently, a EWSR1 Antibody is widely applied in cancer biology, molecular pathology, neuroscience, and RNA biology research.

EWSR1 is routinely analyzed using Western blot, immunohistochemistry, immunofluorescence, immunoprecipitation, and flow cytometry to evaluate protein expression, intracellular localization, and regulation in normal and diseased tissues. Researchers frequently combine EWSR1 detection with markers of transcription, RNA splicing, DNA repair, or oncogenic fusion proteins to obtain a broader understanding of gene regulation and tumor biology. NSJ Bioreagents provides carefully validated antibodies to support these applications across multiple experimental systems. An EWSR1 Antibody / RNA Binding Protein Antibody is a valuable research reagent for investigating transcriptional regulation, RNA metabolism, genome stability, oncogenic gene fusions, and the molecular mechanisms underlying normal cellular function and human disease.

Explore our Transcription Factor Antibodies page to discover validated antibodies for EWSR1 and other proteins involved in transcriptional regulation, RNA processing, gene expression, genome stability, and oncogenic gene fusion research.

Application Notes

Optimal dilution of the EWSR1 Antibody / RNA Binding Protein Antibody should be determined by the researcher.

Immunogen

Amino acids NDSVTLDDLADFFKQCGVVKMNKRTGQPMIH of human EWSR1 were used as the immunogen for the EWSR1 antibody.

Storage

After reconstitution, the EWSR1 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Alternate Names

EWSR1 antibody, RNA Binding Protein antibody, EWS antibody, Ewing Sarcoma Breakpoint Region 1 antibody, Ewing Sarcoma Protein antibody

Copyright © NSJ Bioreagents. All rights reserved.