

EWSR1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP14576b

Product Information

Application	IF, WB, E
Primary Accession	<u>Q01844</u>
Other Accession	<u>Q61545</u> , <u>NP_005234.1</u> , <u>NP_001156757.1</u>
Reactivity	Human, Mouse
Predicted	Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	68478
Antigen Region	623-652

Additional Information

Gene ID	2130
Other Names	RNA-binding protein EWS, EWS oncogene, Ewing sarcoma breakpoint region 1 protein, EWSR1, EWS
Target/Specificity	This EWSR1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 623-652 amino acids from the C-terminal region of human EWSR1.
Dilution	IF~~1:10~50 WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	EWSR1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	EWSR1
Synonyms	EWS
Function	Binds to ssRNA containing the consensus sequence 5'-AGGUAA-3'

	(PubMed: <u>21256132</u>). Might normally function as a transcriptional repressor (PubMed: <u>10767297</u>). EWS-fusion-proteins (EFPS) may play a role in the tumorigenic process. They may disturb gene expression by mimicking, or interfering with the normal function of CTD-POLII within the transcription initiation complex. They may also contribute to an aberrant activation of the fusion protein target genes.
Cellular Location	Nucleus. Cytoplasm. Cell membrane. Note=Relocates from cytoplasm to ribosomes upon PTK2B/FAK2 activation
Tissue Location	Ubiquitous.

Background

This gene encodes a multifunctional protein that is involved in various cellular processes, including gene expression, cell signaling, and RNA processing and transport. The protein includes an N-terminal transcriptional activation domain and a C-terminal RNA-binding domain. Chromosomal translocations between this gene and various genes encoding transcription factors result in the production of chimeric proteins that are involved in tumorigenesis. These chimeric proteins usually consist of the N-terminal transcriptional activation domain of this protein fused to the C-terminal DNA-binding domain of the transcription factor protein. Mutations in this gene, specifically a t(11;22)(q24;q12) translocation, are known to cause Ewing sarcoma as well as neuroectodermal and various other tumors. Alternative splicing of this gene results in multiple transcript variants. Related pseudogenes have been identified on chromosomes 1 and 14. [provided by RefSeq].

References

Lagirand-Cantaloube, J., et al. Biochem. Biophys. Res. Commun. 399(4):705-710(2010) Kumagai, A., et al. Am. J. Clin. Pathol. 134(2):323-331(2010) Aryee, D.N., et al. Cancer Res. 70(10):4015-4023(2010) Riggi, N., et al. Genes Dev. 24(9):916-932(2010) Olsen, J.V., et al. Cell 127(3):635-648(2006)

Images



EWSR1 Antibody (C-term) (Cat. #AP14576b) western blot analysis in Hela cell line lysates (35ug/lane).This demonstrates the EWSR1 antibody detected the EWSR1 protein (arrow).

Fluorescent confocal image of Hela cell stained with EWSR1 Antibody (C-term)(Cat#AP14576b).Hela cells were fixed with 4% PFA (20 min), permeabilized with Triton X-100 (0.1%, 10 min), then incubated with EWSR1 primary antibody (1:25, 1 h at 37°C). For secondary antibody, Alexa Fluor® 488 conjugated donkey anti-rabbit antibody (green) was used (1:400, 50 min at 37°C).Cytoplasmic actin was counterstained with Alexa Fluor® 555 (red)



conjugated Phalloidin (7units/ml, 1 h at 37°C). Nuclei were counterstained with DAPI (blue) (10 μ g/ml, 10 min).EWSR1 immunoreactivity is localized to Nucleus significantly.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.