

EWSR1 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant EWSR1. Catalog # AT1961a

Product Information

Application	WB, IHC, E
Primary Accession	<u>Q01844</u>
Other Accession	<u>NM_005243</u>
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG2a Kappa
Clone Names	5C10
Calculated MW	68478

Additional Information

Gene ID	2130
Other Names	RNA-binding protein EWS, EWS oncogene, Ewing sarcoma breakpoint region 1 protein, EWSR1, EWS
Target/Specificity	EWSR1 (NP_005234, 358 a.a. ~ 453 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 IHC~~1:100~500 E~~N/A
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	EWSR1 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

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.

References

Detection of SYT and EWS gene rearrangements by dual-color break-apart CISH in liquid-based cytology samples of synovial sarcoma and Ewing sarcoma/primitive neuroectodermal tumor. Kumagai A, et al. Am J Clin Pathol, 2010 Aug. PMID 20660338.Hypoxia modulates EWS-FLI1 transcriptional signature and enhances the malignant properties of Ewing's sarcoma cells in vitro. Aryee DN, et al. Cancer Res, 2010 May 15. PMID 20442286.EWS-FLI-1 modulates miRNA145 and SOX2 expression to initiate mesenchymal stem cell reprogramming toward Ewing sarcoma cancer stem cells. Riggi N, et al. Genes Dev, 2010 May. PMID 20382729.Impact of EWS-ETS fusion type on disease progression in Ewing's sarcoma/peripheral primitive neuroectodermal tumor: prospective results from the cooperative Euro-E.W.I.N.G. 99 trial. Le Deley MC, et al. J Clin Oncol, 2010 Apr 20. PMID 20308673.Current treatment protocols have eliminated the prognostic advantage of type 1 fusions in Ewing sarcoma: a report from the Children's Oncology Group. van Doorninck JA, et al. J Clin Oncol, 2010 Apr 20. PMID 20308669.

Images



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (36.3 KDa) .

Western Blot analysis of EWSR1 expression in transfected 293T cell line by EWSR1 monoclonal antibody (M01), clone 5C10.

Lane 1: EWSR1 transfected lysate(68.5 KDa). Lane 2: Non-transfected lysate.



Immunoperoxidase of monoclonal antibody to EWSR1 on formalin-fixed paraffin-embedded human urinary bladder. [antibody concentration 3 ug/ml]

Detection limit for recombinant GST tagged EWSR1 is approximately 0.03ng/ml as a capture antibody.



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