

Goat Anti-EWS / EWSR1 Antibody

Peptide-affinity purified goat antibody Catalog # AF1385a

Specification

Goat Anti-EWS / EWSR1 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Concentration Isotype Calculated MW WB, IHC, E <u>Q01844</u> NP_005234, 2130, 14030 (mouse), 289752 (rat) Human Mouse, Rat, Pig Goat Polyclonal 100ug/200ul IgG 68478

Goat Anti-EWS / EWSR1 Antibody - Additional Information

Gene ID 2130

Other Names RNA-binding protein EWS, EWS oncogene, Ewing sarcoma breakpoint region 1 protein, EWSR1, EWS

Dilution WB~~1:1000 IHC~~1:100~500 E~~N/A

Format

0.5 mg lgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Goat Anti-EWS / EWSR1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-EWS / EWSR1 Antibody - Protein Information

Name EWSR1

Synonyms EWS



Function

Binds to ssRNA containing the consensus sequence 5'-AGGUAA-3' (PubMed:21256132). Might normally function as a transcriptional repressor (PubMed:10767297). 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.

Goat Anti-EWS / EWSR1 Antibody - Protocols

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

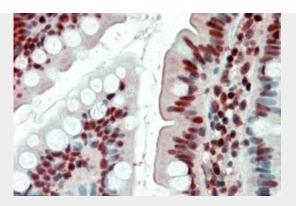
- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Goat Anti-EWS / EWSR1 Antibody - Images



AF1385a (0.1 μ g/ml) staining of nuclear HeLa lysate (35 μ g protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.





AF1385a (3.8 μ g/ml) staining of paraffin embedded Human Small Intestine. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.

Goat Anti-EWS / EWSR1 Antibody - 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.

Goat Anti-EWS / EWSR1 Antibody - 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.