10320 Camino Santa Fe, Suite G
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# Anti-EWSR1 Antibody Picoband™ (monoclonal, 4B4)

**Catalog # ABO14820**

## Specification

### Anti-EWSR1 Antibody Picoband™ (monoclonal, 4B4) - Product Information

| | |
|---|---|
| Application | **WB, IHC** |
| Primary Accession | Q01844 |
| Host | **Mouse** |
| Isotype | **Mouse IgG2b** |
| Reactivity | **Human, Mouse, Monkey** |
| Clonality | **Monoclonal** |
| Format | **Lyophilized** |

**Description**
Anti-EWSR1 Antibody Picoband™ (monoclonal, 4B4) . Tested in IHC, WB applications. This antibody reacts with Human, Monkey, Mouse.

### Anti-EWSR1 Antibody Picoband™ (monoclonal, 4B4) - Additional Information

**Gene ID** 2130

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

**Calculated MW**
95 kDa KDa

**Application Details**
Western blot, 0.1-0.5 µg/ml<br> Immunohistochemistry (Paraffin-embedded Section), 0.5-1 µg/ml<br>

**Subcellular Localization**
Nucleus

**Tissue Specificity**
Ubiquitous.

**Contents**
Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

**Immunogen**
A synthetic peptide corresponding to a sequence in the middle region of human EWSR1, different from the related mouse sequence by one amino acid.

**Cross Reactivity**
No cross-reactivity with other proteins.

| | |
|---|---|
| Storage | **Store at -20˚C for one year from date of receipt. After reconstitution, at 4˚C for one** |

**month. It can also be aliquotted and stored frozen at -20˚C for six months. Avoid repeated freeze-thaw cycles.**

## Anti-EWSR1 Antibody Picoband™ (monoclonal, 4B4) - Protein Information

**Name** EWSR1

**Synonyms** EWS

**Function**
Might normally function as a transcriptional repressor. 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.

## Anti-EWSR1 Antibody Picoband™ (monoclonal, 4B4) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## Anti-EWSR1 Antibody Picoband™ (monoclonal, 4B4) - Images

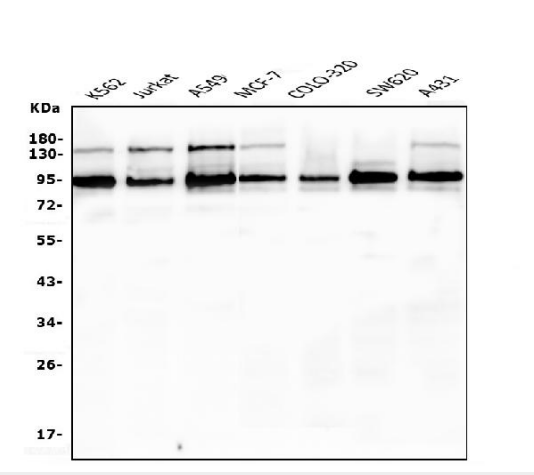

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Figure 1. Western blot analysis of EWSR1 using anti-EWSR1 antibody (M00589).
Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions.
Lane 1: K562 whole cell lysates,
Lane 2: Jurkat whole cell lysates,
Lane 3: A549 whole cell lysates,
Lane 4: MCF-7 whole cell lysates,
Lane 5: COLO-320 whole cell lysates,
Lane 6: SW620 whole cell lysates,
Lane 7: A431 whole cell lysates.
After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with mouse anti-EWSR1 antigen affinity purified monoclonal antibody (Catalog # M00589) at 0.5 µg/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-mouse IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1001) with Tanon 5200 system. A specific band was detected for EWSR1 at approximately 95KD. The expected band size for EWSR1 is at 95KD.

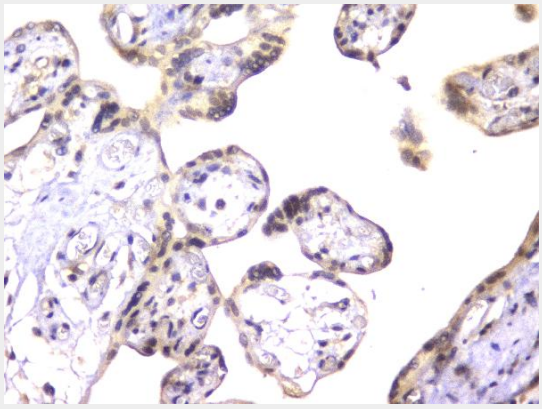

Figure 2. IHC analysis of EWSR1 using anti-EWSR1 antibody (M00589).
EWSR1 was detected in paraffin-embedded section of human placenta tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 µg/ml mouse anti-EWSR1 Antibody (M00589) overnight at 4°C. Biotinylated goat anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) (Catalog # SA1021) with DAB as the chromogen.

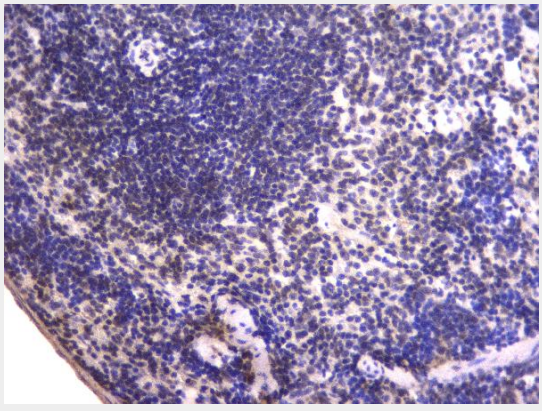

Figure 3. IHC analysis of EWSR1 using anti-EWSR1 antibody (M00589).

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EWSR1 was detected in paraffin-embedded section of mouse spleen tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 µg/ml mouse anti-EWSR1 Antibody (M00589) overnight at 4°C. Biotinylated goat anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) (Catalog # SA1021) with DAB as the chromogen.

**Anti-EWSR1 Antibody Picoband™ (monoclonal, 4B4) - 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.