abcam

ab240055

Anti-EWSR1/EWS antibody [EPR4647] - BSA and Azide free

Recombinant | RabMAb | Advanced Validation

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Carrier free	Yes
Clone number	EPR4647
Purification technique	Affinity purification Protein A
Concentration	1.031 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IHC-P

Tested

Species	Rat, Human, Mouse
Dilution info	-

Notes	-

IP

Not recommended

Species	Mouse, Rat, Human
Dilution info	-
Notes	-

WB

Tested

Species	Mouse, Human
Dilution info	-
Notes	-

Expected

Species	Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	1/500
Notes	-

Expected

Species	Rat, Mouse
Dilution info	Use at an assay dependent concentration.
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	-
Notes	-

Expected

Species	Rat, Mouse
Dilution info	Use at an assay dependent concentration.
Notes	-

ChIC/CUT&RUN-seq

Tested

Species	Human
Dilution info	-
Notes	-

Expected

Species	Rat, Mouse
Dilution info	Use at an assay dependent concentration.
Notes	-

Target data

See full target information EWSR1

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.

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C
Storage information	Do Not Freeze

Notes

ab240055 is the carrier-free version of ab133288.

Patented technology
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

What are the advantages of a recombinant monoclonal antibody?
This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free batch production

For more information, read more on recombinant antibodies.

Conjugation ready
Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with 1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

Compatibility
This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc.

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	The EWS protein also known as EWSR1 or 2'1b1' comes from the EWSR1 gene. It is a part of the TET family of proteins and has a molecular weight of about 68 kDa. EWS is expressed widely in human tissues with high levels in the brain gonads and

	skeletal muscle. The protein contains an RNA-binding domain and amino acid repeats which allow it to interact with other proteins and RNA molecules.
Biological function summary	The EWS protein plays roles in various cellular processes such as transcription and RNA splicing. It can participate in forming different protein complexes which influence its function. EWS serves as a cofactor for several transcription factors and it is important in regulating the expression of genes involved in cell cycle progression and differentiation. The protein's interaction with RNA and other molecules highlights its multifunctional nature within cellular environments.
Pathways	EWS engages in pathways like the regulation of transcription and RNA processing. It closely associates with proteins involved in gene expression surveillance such as the RNA polymerase II which is significant for transcription activities. EWS partners with proteins such as FUS and TAF15 which are essential parts of transcription regulation networks. These interactions place EWS in a central role in cellular regulatory machinery.
Associated diseases and disorders	EWS is notably linked to Ewing sarcoma and neurodegenerative diseases. In Ewing sarcoma EWS forms fusion proteins like EWS-FLI1 by translocation events which lead to tumor formation. This fusion protein acts abnormally in transcription regulation driving oncogenic pathways. EWS's interaction with proteins like FUS and TAF15 also relate it to certain neurodegenerative conditions indicating its importance in both cancer and neurobiology.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

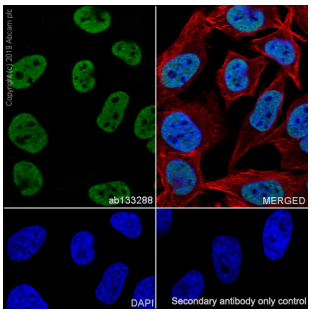
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

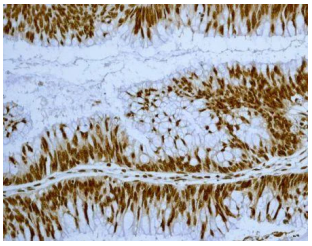
10 product images



Immunocytochemistry/ Immunofluorescence - Anti-EWSR1/EWS antibody [EPR4647] - BSA and Azide free (ab240055)

EWSR1/EWS Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-EWSR1/EWS antibody

Immunocytochemistry/ Immunofluorescence analysis of HeLa (Human cervix adenocarcinoma epithelial cell) cells labeling EWSR1/EWS with purified ab133288 at 1:500 dilution (1.79 µg/ml). Cells were fixed in 4% Paraformaldehyde and permeabilized with 0.1% tritonX-100. Cells were counterstained with ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1:200 (2.5 µg/ml). Goat anti rabbit IgG (Alexa Fluor® 488, ab150077) was used as the secondary antibody at 1:1000 (2 µg/ml) dilution. DAPI (blue) was used as nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab133288)

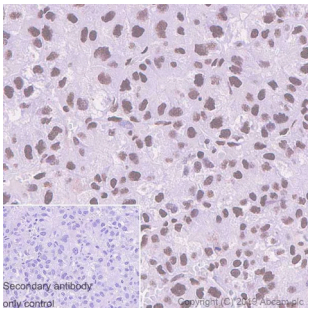


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-EWSR1/EWS antibody [EPR4647] - BSA and Azide free (ab240055)

EWSR1/EWS Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-EWSR1/EWS antibody

Immunohistochemical analysis of paraffin-embedded Human colonic adenocarcinoma tissue labelling EWSR1/EWS with unpurified ab133288 at 1/250 dilution.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab133288).

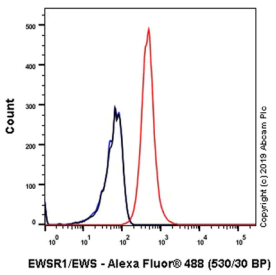
Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-EWSR1/EWS antibody [EPR4647] - BSA and Azide free (ab240055)

EWSR1/EWS Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-EWSR1/EWS antibody

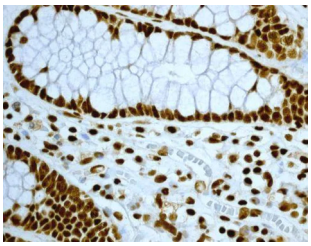
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human liver carcinoma tissue sections labeling EWSR1/EWS with purified ab133288 at 1:500 dilution (1.79 µg/ml). Heat mediated antigen retrieval was performed using Bond ™ Epitope Retrieval Solution 2 (pH 9.0). Rabbit specific IHC polymer detection kit HRP/DAB (ab209101) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab133288)



Flow Cytometry (Intracellular) - Anti-EWSR1/EWS antibody [EPR4647] - BSA and Azide free (ab240055)

EWSR1/EWS Flow Cytometry (Intracellular) staining using rabbit Anti-EWSR1/EWS antibody

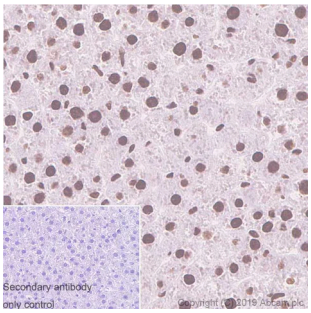
Intracellular Flow Cytometry analysis of HeLa (Human cervix adenocarcinoma epithelial cell) cells labeling EWSR1/EWS with purified ab133288 at 1/100 dilution (10 µg/ml) (Red). Cells were fixed with 4% Paraformaldehyde and permeabilised with 90% Methanol. A Goat anti rabbit IgG (Alexa Fluor® 488, ab150077) secondary antibody was used at 1/2000. Isotype control - Rabbit monoclonal IgG (Black). Unlabeled control - Cell without incubation with primary antibody and secondary antibody (Blue). This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab133288)



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-EWSR1/EWS antibody [EPR4647] - BSA and Azide free (ab240055)

Immunohistochemical analysis of paraffin-embedded Human colon tissue labelling EWSR1/EWS with unpurified ab133288 at 1/250 dilution.
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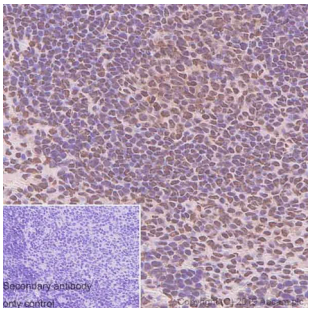
Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-EWSR1/EWS antibody [EPR4647] - BSA and Azide free (ab240055)

EWSR1/EWS Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-EWSR1/EWS antibody

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of rat liver tissue sections labeling EWSR1/EWS with purified ab133288 at 1:500 dilution (1.79 µg/ml). Heat mediated antigen retrieval was performed using Bond ™ Epitope Retrieval Solution 2 (pH 9.0). Rabbit specific IHC polymer detection kit HRP/DAB (ab209101) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.
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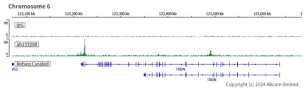


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-EWSR1/EWS antibody [EPR4647] - BSA and Azide free (ab240055)

EWSR1/EWS Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-EWSR1/EWS antibody

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of mouse spleen tissue sections labeling EWSR1/EWS with purified ab133288 at 1:500 dilution (1.79 µg/ml). Heat mediated antigen retrieval was performed using Bond ™ Epitope Retrieval Solution 2 (pH 9.0). Rabbit specific IHC polymer detection kit HRP/DAB (ab209101) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a

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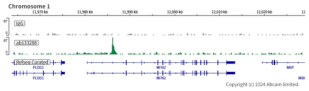


ChIC/CUT&RUN sequencing - Anti-EWSR1/EWS antibody [EPR4647] - BSA and Azide free (ab240055)

This data was developed using the same antibody clone in a different buffer formulation (ab133288).

ChIC/CUT&RUN was performed using a pAG-MNase at a final concentration of 700 ng/mL, 2.5 x 10^5 A-673 (human muscle Ewings sarcoma cell line) cells and 5 µg of ab133288 [EPR4647]. The resulting DNA was sequenced on the Illumina NovaSeq 6000 to a depth of 10 million reads. The negative IgG control ab172730 is also shown.

The University of Geneva owns patents relevant to ChIC (Chromatin Immuno-Cleavage) methods.

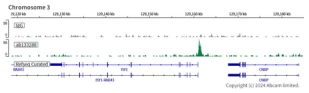


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Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.