abcam

ab245758

Anti-C19orf2 antibody [SP215] - BSA and Azide free

Recombinant | RabMAb

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	SP215
Purification technique	Affinity purification Protein A/G
Concentration	1.029 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →
Purification notes	Purified from TCS by protein A/G.

Reactivity data

IHC-P

Tested

Species	Human
Dilution info	-

Notes	Perform Antigen Retrieval by boiling tissue sections in EDTA buffer, pH 8.0 for 10 min followed by cooling at room temperature for 20 min.

Expected

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

Predicted

Species	Mouse, Cow
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	-
Notes	ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

Species	Rat
Dilution info	-
Notes	ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

Predicted

Species	Mouse, Cow
Dilution info	-
Notes	-

Target data

See full target information URI1

Function	Involved in gene transcription regulation. Acts as a transcriptional repressor in concert with the corepressor UXT to regulate androgen receptor (AR) transcription. May act as a tumor suppressor to repress AR-mediated gene transcription and to inhibit anchorage-independent growth in prostate cancer cells. Required for cell survival in ovarian cancer cells. Together with UXT, associates with chromatin to the NKX3-1 promoter region. Antagonizes transcriptional modulation via hepatitis B virus X protein. Plays a central role in maintaining S6K1 signaling and BAD phosphorylation under normal growth conditions thereby protecting cells from potential deleterious effects of sustained S6K1 signaling. The URI1-PPP1CC complex acts as a central component of a negative feedback mechanism that counteracts excessive S6K1 survival signaling to BAD in response to growth factors. Mediates inhibition of PPP1CC phosphatase activity in mitochondria. Coordinates the regulation of nutrient-sensitive gene expression availability in a mTOR-dependent manner. Seems to be a scaffolding protein able to assemble a prefoldin-like complex that contains PFDs and proteins with roles in transcription and ubiquitination.

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

ab245758 is the carrier-free version of ab183310.

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 protein C19orf2 also known as Myeloid Leukemia Single-stranded DNA-binding Protein (MLSBP) has a molecular mass of approximately 25 kDa. This protein is expressed in various tissues with a particularly high presence in myeloid cells. Mechanically C19orf2 binds to single-stranded DNA and RNA due to its presence in the cell nucleus implicating its involvement in nucleic acid interactions and regulation.
Biological function summary	The protein engages in processes concerning genomic stability and the proper function of the DNA repair system. C19orf2 can interact as a part of a larger protein complex involved in recognizing and binding to abnormal DNA structures. This involvement suggests its participation in maintaining genomic integrity especially in myeloid cells which are important for the immune system's defense mechanisms.
Pathways	The C19orf2 protein integrates into the DNA damage response pathway. This pathway includes proteins like ATM and ATR which initiate signals in response to DNA damage. C19orf2 may therefore contribute to modulating these signals ensuring a proper response to genotoxic stress. Additionally C19orf2 plays a role in the myeloid differentiation pathway interacting with factors like PU.1 influencing the maturation and function of myeloid cells.
Associated diseases and disorders	The dysfunction or aberrant expression of C19orf2 has been linked to acute myeloid leukemia (AML) and other hematopoietic disorders. Structural changes or expression levels of this protein might correlate with the proliferation and survival of leukemic cells. Furthermore C19orf2's relation to DNA repair pathways implicates its relevance in conditions associated with defective DNA repair processes potentially involving proteins like BRCA1 in hereditary breast and ovarian cancer syndromes.

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.

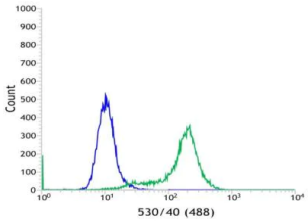
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

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.

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4 product images

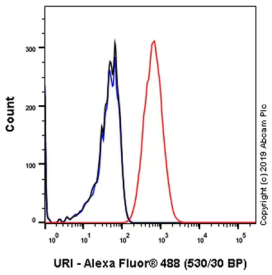


Flow Cytometry (Intracellular) - Anti-C19orf2 antibody [SP215] - BSA and Azide free (ab245758)

C19orf2 Flow Cytometry (Intracellular) staining using rabbit Anti-C19orf2 antibody

Immunohistochemical analysis of Human ovarian adenocarcinoma tissue labeling C19orf2 using ab183310 at a 1/100 dilution.

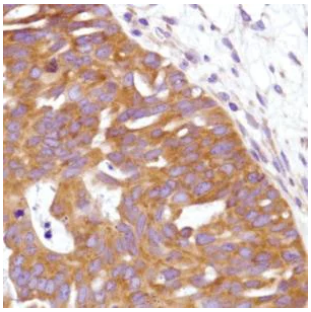
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, and sodium azide (ab183310)



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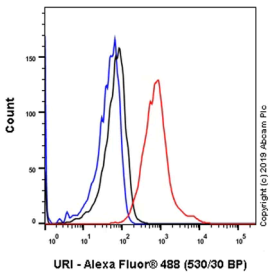
Intracellular Flow Cytometry analysis of 293T (Human embryonic kidney epithelial cell) cells labeling C19orf2 with purified ab183310 at 1/80 dilution (1.09µg/ml) (red). Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. A Goat anti rabbit IgG (Alexa Fluor® 488, ab150077) secondary antibody was used at 1/2000 dilution. Isotype control - Rabbit monoclonal IgG (ab172730) / Black. Unlabeled control - Unlabelled cells / blue.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab183310).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-C19orf2 antibody [SP215] - BSA and Azide free (ab245758)

C19orf2 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-C19orf2 antibody

Immunohistochemical analysis of Human ovarian adenocarcinoma tissue labeling C19orf2 using ab183310 at a 1/100 dilution.
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Flow Cytometry (Intracellular) - Anti-C19orf2 antibody [SP215] - BSA and Azide free (ab245758)

C19orf2 Flow Cytometry (Intracellular) staining using rabbit Anti-C19orf2 antibody

Intracellular Flow Cytometry analysis of C6 (Rat glial tumor glial cell) cells labeling C19orf2 with purified ab183310 at 1/80 dilution (1.09µg/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 dilution. Isotype control - Rabbit monoclonal IgG (ab172730) / Black. Unlabeled control - Unlabelled cells / blue.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab183310).

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