abcam

ab314068

Anti-FOX2/RBM9 antibody [BLR215K] - BSA free

Recombinant

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.8 - 8.6 Preservative: 0.09% Sodium azide Constituents: 98% Borate buffered saline
Form	Liquid
Clonality	Monoclonal
Immunogen	Synthetic Peptide within Human RBFOX2 aa 1-50. The exact immunogen used to generate this antibody is proprietary information. Database link O43251
Clone number	BLR215K
Concentration	1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

Flow Cyt

Tested

Species	Human, Mouse
Dilution info	-
Notes	-

ICC

Tested

Species	Mouse, Human
Dilution info	-
Notes	-

IHC-P

Tested

Species	Mouse, Human
Dilution info	-
Notes	-

IP

Tested

Species	Human
Dilution info	-
Notes	-

Expected

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

WB

Tested

Species	Human, Mouse
Dilution info	-
Notes	-

Target data

See full target information RBFOX2

Function	RNA-binding protein that regulates alternative splicing events by binding to 5'-UGCAUGU-3' elements. Prevents binding of U2AF2 to the 3'-splice site. Regulates alternative splicing of tissue-specific exons and of differentially spliced exons during erythropoiesis (By similarity). RNA-binding protein that seems to act as a coregulatory factor of ER-alpha. Together with RNA binding proteins RBPMS and MBNL1/2, activates vascular smooth muscle cells alternative splicing events (PubMed:37548402).

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage duration	Up to 12 months
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C

Notes

REACH authorisation
Abcam has not and does not intend to apply for the REACH Authorisation of customers' uses of products that contain European Authorisation list (Annex XIV) substances.
It is the responsibility of our customers to check the necessity of application of REACH Authorisation, and any other relevant authorisations, for their intended uses.

Supplementary info

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

Activity summary	Fox2 also known as RBM9 is a protein involved in RNA splicing. It belongs to the Fox family of splicing factors and plays an important role in the regulation of alternative splicing. RBM9 has a mass of approximately 57 kDa. It is expressed in various tissues with notable expression in the brain heart and skeletal muscle. The presence of this protein in such tissues points to a role in neural muscular and cardiac function.
Biological function summary	RBM9 (Fox2) contributes to gene expression by influencing the splicing of pre-mRNA. It forms part of complex networks with other splicing-related proteins such as hnRNPs and SR proteins. Its function in alternative splicing impacts the diversity

	of protein isoforms which is important for cellular processes. This ability to modify gene expression patterns enables cellular adaptation to different physiological conditions.
Pathways	RBM9 interacts with key signaling cascades like PI3K/AKT and MAPK pathways. The protein aids in the regulation of genes involved in these pathways which are essential for cell growth and survival. RBM9 partners with other proteins such as AKT and ERK in these pathways facilitating their roles in cellular signaling. Its regulation of alternative splicing influences pathway outcomes contributing to normal and disease states.
Associated diseases and disorders	Malfunctions in RBM9 splicing regulation have links to neurodegenerative disorders like spinal muscular atrophy and cardiac conditions. RBM9's altered splicing patterns can result in disrupted neural and muscular functions. Its interactions with proteins such as SMN and MyoD connect RBM9 to these conditions indicating its influence on the severity and progression of related disorders. Understanding RBM9's role could offer insight into therapeutic targets for these diseases.

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

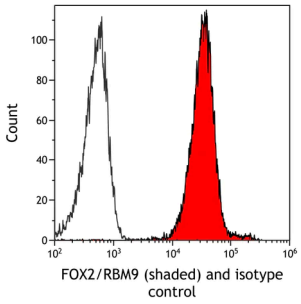
We do not recommend this combination. It is not covered by our product promise.

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.

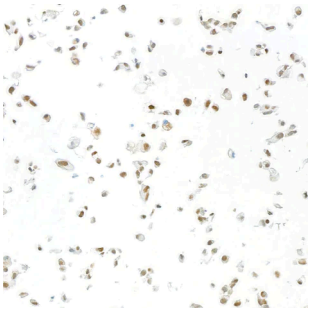
Full details and terms and conditions can be found here:
Terms & Conditions.

9 product images



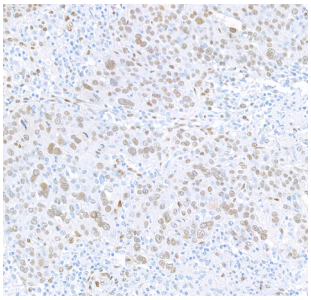
Flow Cytometry - Anti-FOX2/RBM9 antibody [BLR215K] - BSA free (ab314068)

Detection of human FOX2/RBM9 (shaded) in Jurkat cells by flow cytometry. Antibody:Rabbit antiFOX2/RBM9 recombinant monoclonal antibody [BLR215K] (A700-215) or isotype control (unshaded). Secondary:DyLight® 650-conjugated goat anti-rabbit IgG (A120-101D5).



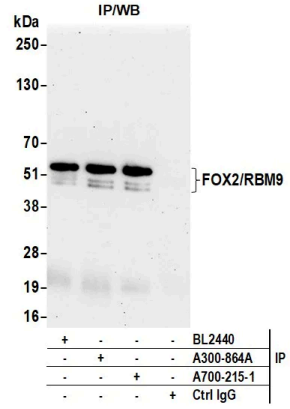
Immunocytochemistry - Anti-FOX2/RBM9 antibody [BLR215K] - BSA free (ab314068)

Sample: FFPE section of GaMG cells. Antibody: Rabbit anti-FOX2/RBM9 recombinant monoclonal antibody [BLR215K] (A700-215CF). Secondary: HRP-conjugated goat anti-rabbit IgG.



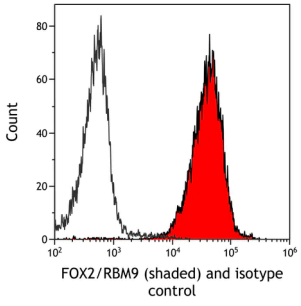
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-FOX2/RBM9 antibody [BLR215K] - BSA free (ab314068)

Sample: FFPE section of breast carcinoma. Antibody: Rabbit anti-FOX2/RBM9 recombinant monoclonal antibody [BLR215K] (A700-215CF). Secondary: HRP-conjugated goat anti-rabbit IgG.



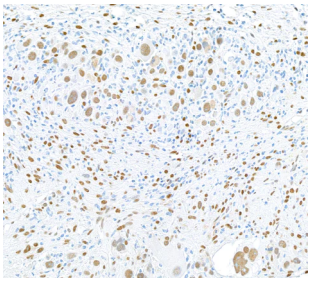
Immunoprecipitation - Anti-FOX2/RBM9 antibody [BLR215K] - BSA free (ab314068)

Samples: Whole cell lysate (1.0 mg per IP reaction; 20% of IP loaded) from HEK293T cells prepared using NETN lysis buffer. Antibodies: Rabbit antiFOX2/RBM9 recombinant monoclonal antibody [BLR215K] used for IP at 20 µl/mg lysate. FOX2/RBM9 was also immunoprecipitated by an antibody against a different epitope of FOX2/RBM9 (BL2440) and a polyclonal antibody against the same epitope of FOX2/RBM9 For blotting immunoprecipitated FOX2/RBM9, A700-215 was used at 1:1000. Chemiluminescence with an exposure time of 30 seconds.



Flow Cytometry - Anti-FOX2/RBM9 antibody [BLR215K] - BSA free (ab314068)

Detection of mouse FOX2/RBM9 (shaded) in EL4 cells by flow cytometry. Antibody: Rabbit anti-FOX2/RBM9 recombinant monoclonal antibody [BLR215K] (A700-215) or isotype control (unshaded). Secondary: 650-conjugated goat anti-rabbit IgG



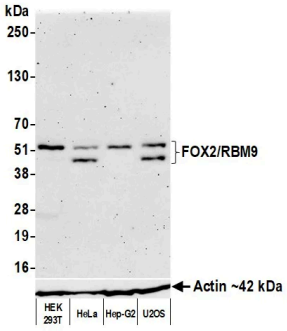
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-FOX2/RBM9 antibody [BLR215K] - BSA free (ab314068)

Detection of mouse FOX2/RBM9 by immunohistochemistry. Sample: FFPE section of RENCA Tumor. Antibody: Rabbit anti-FOX2/RBM9 recombinant monoclonal antibody [BLR215K] (A700-215CF). Secondary: HRP-conjugated goat anti-rabbit IgG.



Immunocytochemistry - Anti-FOX2/RBM9 antibody [BLR215K] - BSA free (ab314068)

Sample: FFPE section of NIH 3T3 cells. Antibody: Rabbit anti-FOX2/RBM9 recombinant monoclonal antibody [BLR215K] (A700-215CF). Secondary: HRP-conjugated goat anti-rabbit IgG.



Western blot - Anti-FOX2/RBM9 antibody [BLR215K] - BSA free (ab314068)

Samples: Whole cell lysate (50 µg) from HEK293T, HeLa, Hep-G2, and U2OS cells prepared using NETN lysis buffer. Antibody: Rabbit anti-FOX2/RBM9 recombinant monoclonal antibody [BLR215K] used at 1:1000. Secondary: HRP-conjugated goat anti-rabbit IgG. Chemiluminescence with an exposure time of 3 minutes. Lower Panel: Rabbit anti-Actin recombinant monoclonal antibody
All lanes:
Western blot - Anti-FOX2/RBM9 antibody [BLR215K] - BSA free (ab314068) at 1/1000 dilution

Lane 1:
HEK293T Whole cell lysate at 50 µg

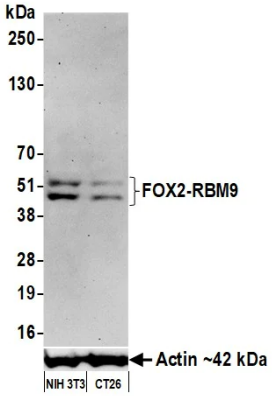
Lane 2:
HeLa Whole cell lysate at 50 µg

Lane 3:
Hep-G2 Whole cell lysate at 50 µg

Lane 4:
U2OS Whole cell lysate at 50 µg

Secondary

All lanes:
HRP-conjugated goat anti-rabbit IgG



Western blot - Anti-FOX2/RBM9 antibody [BLR215K] - BSA free (ab314068)

Samples: Whole cell lysate (50 µg) from NIH 3T3 and CT26 cells prepared using NETN lysis buffer. Antibody: Rabbit antiFOX2/RBM9 recombinant monoclonal antibody [BLR215K] used at 1:1000. Secondary: HRP-conjugated goat anti-rabbit IgG. Chemiluminescence with an exposure time of 75 seconds. Lower Panel: Rabbit anti-Actin recombinant monoclonal antibody
All lanes:
Western blot - Anti-FOX2/RBM9 antibody [BLR215K] - BSA free (ab314068) at 1/1000 dilution

Lane 1:
NIH 3T3 Whole cell lysate at 50 µg

Lane 2:
CT26 Whole cell lysate at 50 µg

Secondary

All lanes:
HRP-conjugated goat anti-rabbit IgG

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