abcam

ab254412

Anti-A2BP1/Fox1/RBFOX1 antibody [EPR23627-50]

Recombinant | RabMAb | 20ul selling size

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR23627-50
Purification technique	Affinity purification Protein A
Concentration	0.572 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

ICC/IF

Tested

Species	Mouse
Dilution info	1/100
Notes	-

Species	Rat

Dilution info	1/100
Notes	-

Species	Human
Dilution info	1/100
Notes	-

IP

Tested

Species	Mouse
Dilution info	1/30
Notes	-

Species	Human
Dilution info	1/30
Notes	-

Expected

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

WB

Tested

Species	Mouse
Dilution info	1/1000
Notes	-

Species	Rat
Dilution info	1/1000
Notes	-

Species	Human
Dilution info	1/1000
Notes	-

IHC-P

Not recommended

Species	Mouse, Rat, Human
Dilution info	-
Notes	-

IHC-Fr

Tested

Species	Mouse
Dilution info	1/100
Notes	Heat mediated antigen retrieval using sodium citrate buffer (10mM citrate pH 6.0 + 0.05% Tween-20)

Species	Rat
Dilution info	1/100
Notes	Heat mediated antigen retrieval using sodium citrate buffer (10mM citrate pH 6.0 + 0.05% Tween-20)

Expected

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

Flow Cyt (Intra)

Tested

Species	Mouse

Dilution info	1/500
Notes	-

Species	Human
Dilution info	1/500
Notes	-

Expected

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

Target data

See full target information RBFOX1

Function	RNA-binding protein that regulates alternative splicing events by binding to 5'-UGCAUGU-3' elements. Regulates alternative splicing of tissue-specific exons and of differentially spliced exons during erythropoiesis.

Storage

Shipped at conditions	Conditional Ambient
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Notes

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.

Supplementary info

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

Activity summary	The A2BP1 protein also known as Fox1 or RBFOX1 is a splicing factor that serves an important role in alternative RNA splicing. The protein has a mass of approximately 43 kDa and prominently expresses in the brain muscle and heart. A2BP1/Fox1 is recognized for its RNA-binding capabilities specifically targeting the (U)GCAUG sequence which facilitates the regulation of exon inclusion or skipping during mRNA processing.
Biological function summary	A2BP1/Fox1 influences neuronal and muscle development by managing the splicing of important pre-mRNAs. It operates as part of a larger splicing complex collaborating with other RNA-binding proteins to ensure the proper expression of gene transcripts. This control is vital for neuron-specific and muscle-specific exon recognition affecting the functional states of cells in these tissues.
Pathways	A2BP1/Fox1 activity is integral to the nervous system and muscle development pathways. In the nervous system it links closely with proteins like CELF and PTBP1 modulating the splicing of transcripts involved in synaptic functions. Similarly in muscle development A2BP1/Fox1 works with splicing factors within the pathways that direct muscle differentiation and function such as those involving the protein myogenin.
Associated diseases and disorders	A2BP1/Fox1 has connections to neurological conditions like autism spectrum disorders (ASD) and epilepsy. Altered expression or mutations in the RBFOX1 gene have associations with these conditions impacting neural connectivity and function. In epilepsy A2BP1/Fox1 appears linked with synaptic proteins which when improperly spliced can disrupt normal neuronal signaling contributing to the disorder's pathogenesis.

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.

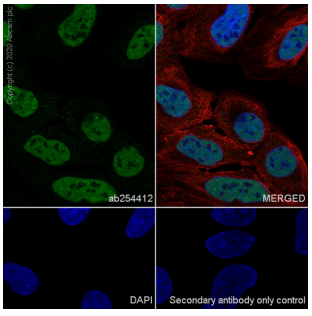
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

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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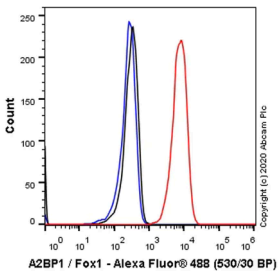
15 product images



Immunocytochemistry/ Immunofluorescence - Anti-A2BP1/Fox1/RBFOX1 antibody [EPR23627-50] (ab254412)

A2BP1/Fox1/RBFOX1 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-A2BP1/Fox1/RBFOX1 antibody

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized U-2 OS cells labelling A2BP1/Fox1/RBFOX1 with ab254412 at 1/100 (5.72 ug/ml) dilution, followed by ab150077 Goat Anti-Rabbit IgG H&L (Alexa Fluor®488) antibody at 1/1000 2 ug/ml dilution (Green). Confocal image showing nuclear and weakly cytoplasmic staining in U-2 OS cell line is observed. ab195889 Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor®594) was used to counterstain tubulin at 1/200 dilution (Red). The Nuclear counterstain was DAPI (Blue).
Secondary antibody only control: Secondary antibody is ab150077 Goat Anti-Rabbit IgG H&L (Alexa Fluor®488) at 1/1000 dilution.

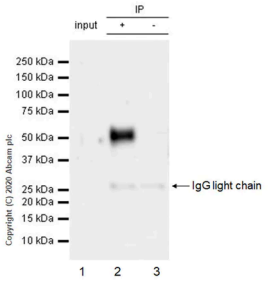


Flow Cytometry (Intracellular) - Anti-A2BP1/Fox1/RBFOX1 antibody [EPR23627-50] (ab254412)

A2BP1/Fox1/RBFOX1 Flow Cytometry (Intracellular) staining using rabbit Anti-A2BP1/Fox1/RBFOX1 antibody

Flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized U-2 OS (human bone osteosarcoma epithelial cell) cells labelling A2BP1/Fox1/RBFOX1 with ab254412 at 1/500 dilution (Red) compared with a Rabbit monoclonal IgG (ab172730) (Black) isotype control and an unlabelled control (cells without incubation with primary antibody and secondary

antibody) (Blue). A Goat anti rabbit IgG (Alexa Fluor® 488, ab150077) at 1/2000 dilution was used as the secondary antibody.



Immunoprecipitation - Anti-A2BP1/Fox1/RBFOX1 antibody [EPR23627-50] (ab254412)

A2BP1/Fox1/RBFOX1 was immunoprecipitated from 0.35 mg Human brain tissue lysate 10 ug with ab254412 at 1/30 dilution (2ug in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab254412 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (ab131366) was used at 1/5000 dilution.
Lane 1: Human brain tissue lysate 10 ug

Lane 2: ab254412 IP in Human brain tissue lysate

Lane 3:Rabbit monoclonal IgG (ab172730) instead of ab254412 in human brain tissue lysate

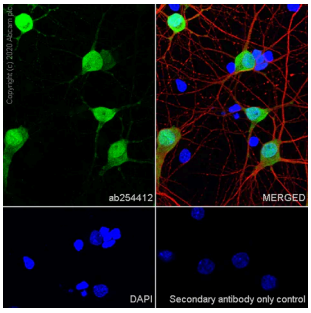
Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 32 seconds.

All lanes:
Immunoprecipitation - Anti-A2BP1/Fox1/RBFOX1 antibody [EPR23627-50] (ab254412)

Predicted band size: 42 kDa

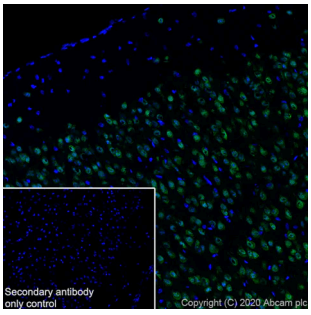
Observed band size: 43 kDa



Immunocytochemistry/ Immunofluorescence - Anti-A2BP1/Fox1/RBFOX1 antibody [EPR23627-50] (ab254412)

A2BP1/Fox1/RBFOX1 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-A2BP1/Fox1/RBFOX1 antibody

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized rat primary neural/glia cell cells labelling A2BP1/Fox1/RBFOX1 with ab254412 at 1/100 (11.44 ug/ml) dilution, followed by ab150077 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) antibody at 1/1000 dilution (Green). Confocal image showing nuclear and cytoplasmic staining in rat primary neuron. Confocal scanning Z step was set as 0.3 µm followed by image processing with maximum Z projection is observed. ab11267 Anti-MAP2 mouse monoclonal antibody was used to counterstain tubulin at 1/200 2.5 dilution (Red). The Nuclear counterstain was DAPI (Blue).
Secondary antibody only control: Secondary antibody is ab150077 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) at 1/1000 dilution.



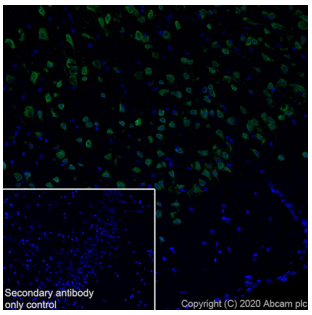
Immunohistochemistry (Frozen sections) - Anti-A2BP1/Fox1/RBFOX1 antibody [EPR23627-50] (ab254412)

A2BP1/Fox1/RBFOX1 Immunohistochemistry (Frozen sections) staining using rabbit Anti-A2BP1/Fox1/RBFOX1 antibody

Immunohistochemical analysis of 4% PFA-fixed, 0.2% Triton X-100 permeabilized frozen Mouse cerebrum tissue labeling A2BP1/Fox1/RBFOX1 with ab254412 at 1/500 (1.144 ug/ml) dilution followed by ab150077 Goat Anti-Rabbit IgG H&L (Alexa Fluor®488) at 1/1000 dilution (Green). Positive staining on mouse cerebrum is observed. The nuclear counterstain was DAPI (Blue).

Secondary antibody control: Secondary antibody is ab150077 Goat Anti-Rabbit IgG H&L (Alexa Fluor®488)at 1/1000 dilution.

Heat mediated antigen retrieval using sodium citrate buffer (10mM citrate pH 6.0 + 0.05% Tween-20).

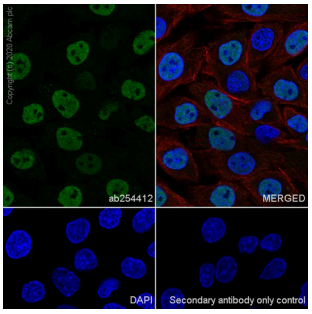


Immunohistochemistry (Frozen sections) - Anti-A2BP1/Fox1/RBFOX1 antibody [EPR23627-50] (ab254412)

A2BP1/Fox1/RBFOX1 Immunohistochemistry (Frozen sections) staining using rabbit Anti-A2BP1/Fox1/RBFOX1 antibody

Immunohistochemical analysis of 4% PFA-fixed, 0.2% Triton X-100 permeabilized frozen Rat cerebrum tissue labeling A2BP1/Fox1/RBFOX1 with ab254412 at 1/500 (1.144 ug/ml) dilution followed by ab150077 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) at 1/1000 dilution (Green). Positive staining on rat cerebrum is observed. The nuclear counterstain was DAPI (Blue).
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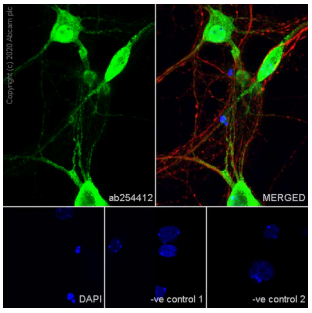
Heat mediated antigen retrieval using sodium citrate buffer (10mM citrate pH 6.0 + 0.05% Tween-20).



Immunocytochemistry/ Immunofluorescence - Anti-A2BP1/Fox1/RBFOX1 antibody [EPR23627-50] (ab254412)

A2BP1/Fox1/RBFOX1 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-A2BP1/Fox1/RBFOX1 antibody

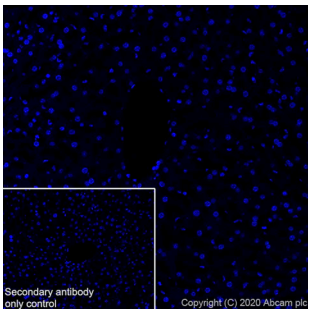
Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized L6 cells labelling A2BP1/Fox1/RBFOX1 with ab254412 at 1/100 (5.72 ug/ml) dilution, followed by ab150077 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) antibody at 1/1000 2 ug/ml dilution (Green). Confocal image showing nuclear and weakly cytoplasmic staining in L6 cell line is observed. ab195889 Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 dilution (Red). The Nuclear counterstain was DAPI (Blue).
Secondary antibody only control: Secondary antibody is ab150077 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) at 1/1000 dilution.



Immunocytochemistry/ Immunofluorescence - Anti-A2BP1/Fox1/RBFOX1 antibody [EPR23627-50] (ab254412)

A2BP1/Fox1/RBFOX1 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-A2BP1/Fox1/RBFOX1 antibody

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized mouse primary neural/glia cell cells labelling A2BP1/Fox1/RBFOX1 with ab254412 at 1/100 dilution, followed by ab150077 Goat Anti-Rabbit IgG H&L (Alexa Fluor®488) antibody at 1/1000 (Green). Confocal image showing nuclear and cytoplasmic staining in mouse primary neuron.Confocal scanning Z step was set as 0.3 µm followed by image processing with maximum Z projection is observed. ab11267 Anti-MAP2 mouse monoclonal antibody was used to counterstain tubulin at 1/200 dilution (Red). The Nuclear counterstain was DAPI (Blue).
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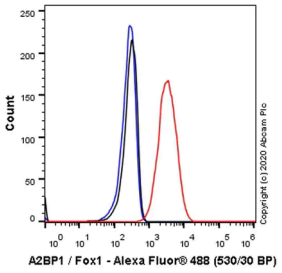


Immunohistochemistry (Frozen sections) - Anti-A2BP1/Fox1/RBFOX1 antibody [EPR23627-50] (ab254412)

A2BP1/Fox1/RBFOX1 Immunohistochemistry (Frozen sections) staining using rabbit Anti-A2BP1/Fox1/RBFOX1 antibody

Immunohistochemical analysis of 4% PFA-fixed, 0.2% Triton X-100 permeabilized frozen Mouse liver tissue labeling A2BP1/Fox1/RBFOX1 with ab254412 at 1/100 (5.72 ug/ml) dilution followed by ab150077 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) at 1/1000 dilution (Green). Negative control: no staining on mouse liver (PMID: 16260614) is observed. The nuclear counterstain was DAPI (Blue).
Secondary antibody control: Secondary antibody is ab150077 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488)at 1/1000 dilution.

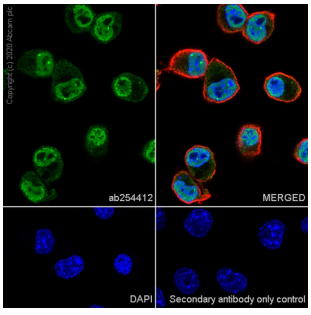
Heat mediated antigen retrieval using sodium citrate buffer (10mM citrate pH 6.0 + 0.05% Tween-20).



Flow Cytometry (Intracellular) - Anti-A2BP1/Fox1/RBFOX1 antibody [EPR23627-50] (ab254412)

A2BP1/Fox1/RBFOX1 Flow Cytometry (Intracellular) staining using rabbit Anti-A2BP1/Fox1/RBFOX1 antibody

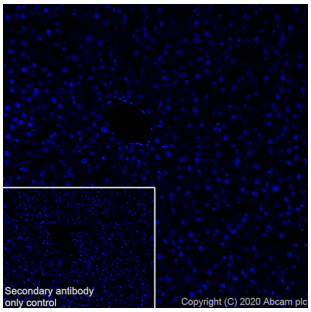
Flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized Neuro-2a (mouse neuroblastoma neuroblast) cells labelling A2BP1/Fox1/RBFOX1 with ab254412 at 1/500 dilution (Red) compared with a Rabbit monoclonal IgG (ab172730) (Black) isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). A Goat anti rabbit IgG (Alexa Fluor® 488, ab150077) at 1/2000 dilution was used as the secondary antibody.



Immunocytochemistry/ Immunofluorescence - Anti-A2BP1/Fox1/RBFOX1 antibody [EPR23627-50] (ab254412)

A2BP1/Fox1/RBFOX1 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-A2BP1/Fox1/RBFOX1 antibody

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized Neuro-2a cells labelling A2BP1/Fox1/RBFOX1 with ab254412 at 1/100 (5.72 ug/ml) dilution, followed by ab150077 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) antibody at 1/1000 dilution (Green). Confocal image showing nuclear and cytoplasmic staining in Neuro-2a cell line is observed. ab195889 Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 dilution (Red). The Nuclear counterstain was DAPI (Blue).
Secondary antibody only control: Secondary antibody is ab150077 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) at 1/1000 dilution.

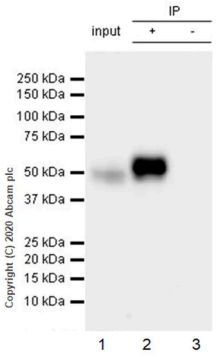


Immunohistochemistry (Frozen sections) - Anti-A2BP1/Fox1/RBFOX1 antibody [EPR23627-50] (ab254412)

A2BP1/Fox1/RBFOX1 Immunohistochemistry (Frozen sections) staining using rabbit Anti-A2BP1/Fox1/RBFOX1 antibody

Immunohistochemical analysis of 4% PFA-fixed, 0.2% Triton X-100 permeabilized frozen Rat liver tissue labeling A2BP1/Fox1/RBFOX1 with ab254412 at 1/100 (5.72 ug/ml) dilution followed by ab150077 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) at 1/1000 dilution (Green). Negative control: no staining on rat liver (PMID: 16260614) is observed. The nuclear counterstain was DAPI (Blue). Secondary antibody control: Secondary antibody is ab150077 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488)at 1/1000 dilution.

Heat mediated antigen retrieval using sodium citrate buffer (10mM citrate pH 6.0 + 0.05% Tween-20).



Immunoprecipitation - Anti-A2BP1/Fox1/RBFOX1 antibody [EPR23627-50] (ab254412)

A2BP1/Fox1/RBFOX1 was immunoprecipitated from 0.35 mg Mouse brain tissue lysate 10 ug with ab254412 at 1/30 dilution (2ug in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab254412 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (ab131366) was used at 1/5000 dilution.
Lane 1: Mouse brain tissue lysate 10 ug

Lane 2: ab254412 IP in Mouse brain tissue lysate

Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab254412 in mouse brain tissue lysate

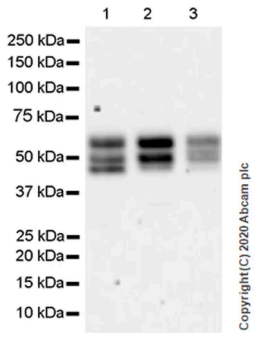
Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 15 seconds.

All lanes:
Immunoprecipitation - Anti-A2BP1/Fox1/RBFOX1 antibody [EPR23627-50] (ab254412)

Predicted band size: 42 kDa

Observed band size: 43 kDa



Western blot - Anti-A2BP1/Fox1/RBFOX1 antibody [EPR23627-50] (ab254412)

Blocking and diluting buffer and concentration: 5% NFDM/TBST
Exposure time: 103 seconds

All lanes:
Western blot - Anti-A2BP1/Fox1/RBFOX1 antibody [EPR23627-50] (ab254412) at 1/2000 dilution

Lane 1:
U-2 OS (human bone osteosarcoma epithelial cell) whole cell lysate at 20 µg

Lane 2:
Neuro-2a (mouse neuroblastoma neuroblast) whole cell lysate at 20 µg

Lane 3:

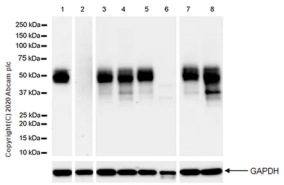
L6 (rat skeletal muscle myoblast) whole cell lysate at 20 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Predicted band size: 42 kDa

Observed band size: 43 kDa



Western blot - Anti-A2BP1/Fox1/RBFOX1 antibody [EPR23627-50] (ab254412)

A2BP1/Fox1/RBFOX1 Western blot staining using rabbit Anti-A2BP1/Fox1/RBFOX1 antibody

Blocking and diluting buffer and concentration: 5% NFDM/TBST
Negative control: liver(PMID:12574126, PMID:16260614, PMID:20724578, PMID:20724578, PMID:10814712).

Exposure time: Lanes 1-2: 3 minutes; Lanes 3-6: 3 seconds; Lanes 7-8: 6 seconds.

All lanes:
Western blot - Anti-A2BP1/Fox1/RBFOX1 antibody [EPR23627-50] (ab254412) at 1/1000 dilution

Lane 1:
Human brain tissue lysate at 20 µg

Lane 2:
Human liver tissue lysate at 20 µg

Lane 3:
Mouse brain tissue lysate at 20 µg

Lane 4:
Mouse brain cortex tissue lysate at 20 µg

Lane 5:
Mouse skeletal muscle tissue lysate at 20 µg

Lane 6:
Mouse liver tissue lysate at 20 µg

Lane 7:
Rat brain tissue lysate at 20 µg

Lane 8:
Rat brain cortex tissue lysate at 20 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Predicted band size: 42 kDa

Observed band size: 43 kDa

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