abcam

ab314506

Anti-Fibrillarin+Fibrillarin-like protein 1 antibody [RM1082]

Recombinant | RabMAb | 20ul selling size

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Multiclonal
Immunogens	The exact immunogen used to generate this antibody is proprietary information.
Clone number	RM1082
Purification technique	Affinity purification Protein A
Concentration	0.497 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

WB

Tested

Species	Human
Dilution info	1/1000
Notes	-

Species	Mouse
Dilution info	1/1000
Notes	-

Species	Rat
Dilution info	1/1000
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	1/500
Notes	-

Species	Mouse
Dilution info	1/500
Notes	-

Species	Rat
Dilution info	1/500
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/500
Notes	-

Species	Mouse
Dilution info	1/500
Notes	-

Species	Rat

Dilution info	1/500
Notes	-

IP

Tested

Species	Human
Dilution info	1/30
Notes	-

Species	Mouse
Dilution info	1/30
Notes	-

Species	Rat
Dilution info	1/30
Notes	-

IHC-P

Tested

Species	Mouse
Dilution info	1/2000
Notes	Perform heat-mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Species	Rat
Dilution info	1/2000
Notes	Perform heat-mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Species	Human
Dilution info	1/2000
Notes	Perform heat-mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Target data

See full target information FBL

Function	S-adenosyl-L-methionine-dependent methyltransferase that has the ability to methylate both RNAs and proteins (PubMed:24352239, PubMed:30540930, PubMed:32017898). Involved in pre-rRNA processing by catalyzing the site-specific 2'-hydroxyl methylation of ribose moieties in pre-ribosomal RNA (PubMed:30540930). Site specificity is provided by a guide RNA that base pairs with the substrate (By similarity). Methylation occurs at a characteristic distance from the sequence involved in base pairing with the guide RNA (By similarity). Probably catalyzes 2'-O-methylation of U6 snRNAs in box C/D RNP complexes (PubMed:32017898). U6 snRNA 2'-O-methylation is required for mRNA splicing fidelity (PubMed:32017898). Also acts as a protein methyltransferase by mediating methylation of 'Gln-105' of histone H2A (H2AQ104me), a modification that impairs binding of the FACT complex and is specifically present at 35S ribosomal DNA locus (PubMed:24352239, PubMed:30540930). Part of the small subunit (SSU) processome, first precursor of the small eukaryotic ribosomal subunit. During the assembly of the SSU processome in the nucleolus, many ribosome biogenesis factors, an RNA chaperone and ribosomal proteins associate with the nascent pre-rRNA and work in concert to generate RNA folding, modifications, rearrangements and cleavage as well as targeted degradation of pre-ribosomal RNA by the RNA exosome (PubMed:34516797).

Storage

Shipped at conditions	Blue Ice
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

What are recombinant multiclonals?
Recombinant multiclonals are a mixture of recombinant antibodies co-expressed from a library of heavy and light chains. They offer several advantages including:

- The sensitivity of polyclonal antibodies by recognising multiple epitopes
- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free batch production

View our range of recombinant multiclonal antibodies.

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.

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

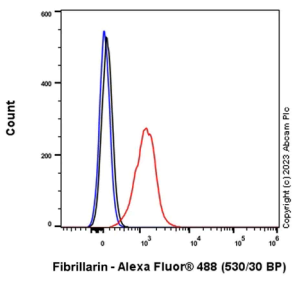
We do not recommend this combination. It is not covered by our product promise.

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.

14 product images

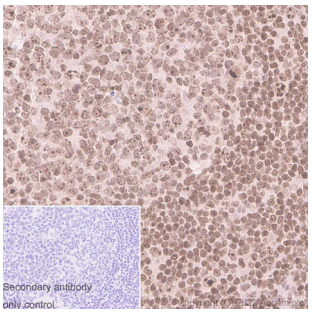


Flow Cytometry (Intracellular) - Anti-Fibrillarin+Fibrillarin-like protein 1 antibody [RM1082] (ab314506)

Fibrillarin+Fibrillarin-like protein 1 Flow Cytometry (Intracellular) staining of Hela (human cervical adenocarcinoma epithelial cell) using rabbit Anti-Fibrillarin+Fibrillarin-like protein 1 antibody

Flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized Hela (human cervical adenocarcinoma epithelial cell) cells labelling Fibrillarin with ab314506 at 1/500 dilution (0.1 ug)/Red (Red) compared with a Rabbit monoclonal IgG (ab172730) (Black) isotype control and an unlabelled control (cells without incubation with primary antibody and secondary

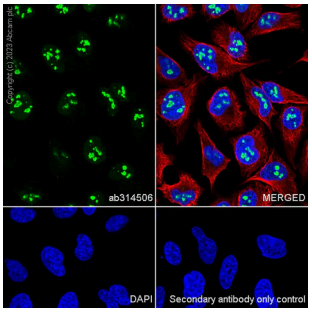
antibody) (Blue). A Goat Anti-Rabbit IgG (Alexa Fluor® 488, ab150081) at 1/5000 dilution was used as the secondary antibody.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Fibrillarin+Fibrillarin-like protein 1 antibody [RM1082] (ab314506)

Fibrillarin+Fibrillarin-like protein 1 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of Human tonsil using rabbit Anti-Fibrillarin+Fibrillarin-like protein 1 antibody

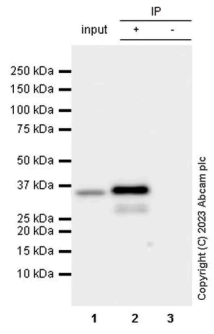
Immunohistochemical analysis of paraffin-embedded Human tonsil tissue labeling Fibrillarin with ab314506 at 1/2000 (0.249 ug/ml) followed by a ready to use Goat Anti-Rabbit IgG H&L (HRP polymer) (ab214880). Nucleolus staining on human tonsil The section was incubated with ab314506 at 4°C overnight. Counterstained with Hematoxylin. Secondary antibody only control: Secondary antibody is a ready to use Goat Anti-Rabbit IgG H&L (HRP polymer) (ab214880). Heat mediated antigen retrieval was performed using ab93678 (citrate buffer, pH 6.0)



Immunocytochemistry/ Immunofluorescence - Anti-Fibrillarin+Fibrillarin-like protein 1 antibody [RM1082] (ab314506)

Fibrillarin+Fibrillarin-like protein 1 Immunocytochemistry/ Immunofluorescence staining of HeLa (human cervical adenocarcinoma epithelial cell) using rabbit Anti-Fibrillarin+Fibrillarin-like protein 1 antibody

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized HeLa (human cervical adenocarcinoma epithelial cell) cells labelling Fibrillarin with ab314506 at 1/500 (0.994 ug/ml) dilution, followed by ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed antibody at 1/1000 2ug/ml dilution (Green). Confocal image showing nucleolar staining in HeLa cell line.Image was taken with a confocal microscope(Leica-Microsystems, TCS SP8). ab195889 Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 2.5ug/ml dilution (Red). The Nuclear counterstain was DAPI (Blue). Secondary antibody only control: Secondary antibody is ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 2ug/ml dilution.



Immunoprecipitation - Anti-Fibrillarin+Fibrillarin-like protein 1 antibody [RM1082] (ab314506)

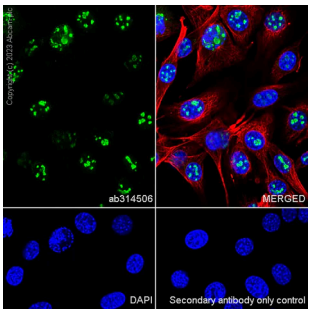
Fibrillarin was immunoprecipitated from 0.35 mg HeLa (human cervical adenocarcinoma epithelial cell) whole cell lysate with ab314506 at 1/30 dilution (2ug in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab314506 at 1/1000 dilution. VeriBlot for IP secondary antibody(HRP)(ab131366) was used at 1/5000 dilution. Lane 1: HeLa (human cervical adenocarcinoma epithelial cell) whole cell lysate Lane 2: ab314506 IP in HeLa (human cervical adenocarcinoma epithelial cell) whole cell lysate Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab314506 in HeLa whole cell lysate Blocking and dilution buffer and concentration: 5% NFDM/TBST. Lower band around 26kDa is supposed to be the degradation form of fibrillarin according to the literature (PMID: 31347059).
All lanes:
Immunoprecipitation - Anti-Fibrillarin+Fibrillarin-like protein 1 antibody [RM1082] (ab314506) at 1/30 dilution

All lanes:
HeLa (human cervical adenocarcinoma epithelial cell) whole cell lysate

Secondary

All lanes:
Immunoprecipitation - VeriBlot for IP Detection Reagent (HRP) (ab131366) at 1/5000 dilution

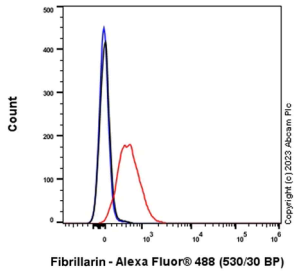
Exposure time: 5s



Immunocytochemistry/ Immunofluorescence - Anti-Fibrillarin+Fibrillarin-like protein 1 antibody [RM1082] (ab314506)

Fibrillarin+Fibrillarin-like protein 1 Immunocytochemistry/ Immunofluorescence staining of NIH/3T3 (mouse embryonic fibroblast cell) using rabbit Anti-Fibrillarin+Fibrillarin-like protein 1 antibody

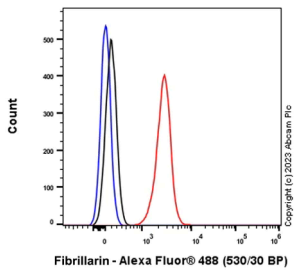
Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized NIH/3T3 (mouse embryonic fibroblast cell) cells labelling Fibrillarin with ab314506 at 1/500 (0.994 ug/ml) dilution, followed by ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed antibody at 1/1000 2ug/ml dilution (Green). Confocal image showing nucleolar staining in NIH/3T3 cell line.Image was taken with a confocal microscope(Leica-Microsystems, TCS SP8). ab195889 Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 2.5ug/ml dilution (Red). The Nuclear counterstain was DAPI (Blue). Secondary antibody only control: Secondary antibody is ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 2ug/ml dilution.



Flow Cytometry (Intracellular) - Anti-Fibrillarin+Fibrillarin-like protein 1 antibody [RM1082] (ab314506)

Fibrillarin+Fibrillarin-like protein 1 Flow Cytometry (Intracellular) staining of PC-12 (rat adrenal gland pheochromocytoma cell) using rabbit Anti-Fibrillarin+Fibrillarin-like protein 1 antibody

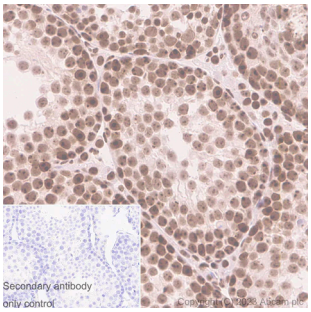
Flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized PC-12 (rat adrenal gland pheochromocytoma cell) cells labelling Fibrillarin with ab314506 at 1/500 dilution (0.1 ug)/Red (Red) compared with a Rabbit monoclonal IgG (ab172730) (Black) isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). A Goat Anti-Rabbit IgG (Alexa Fluor® 488, ab150081) at 1/5000 dilution was used as the secondary antibody.



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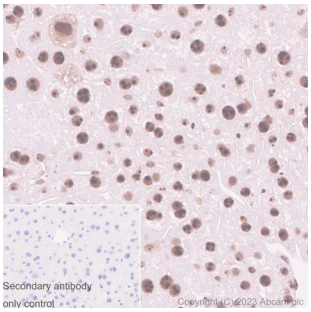
Flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized NIH/3T3 (mouse embryonic fibroblast) cells labelling Fibrillarin with ab314506 at 1/500 dilution (0.1 ug)/Red (Red) compared with a Rabbit monoclonal IgG (ab172730) (Black) isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). A Goat Anti-Rabbit IgG (Alexa Fluor® 488, ab150081) at 1/5000 dilution was used as the secondary antibody.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Fibrillarin+Fibrillarin-like protein 1 antibody [RM1082] (ab314506)

Fibrillarin+Fibrillarin-like protein 1 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of Mouse testis using rabbit Anti-Fibrillarin+Fibrillarin-like protein 1 antibody

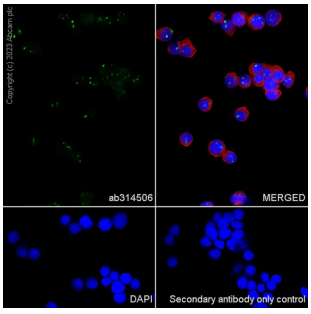
Immunohistochemical analysis of paraffin-embedded Mouse testis tissue labeling Fibrillarin with ab314506 at 1/2000 (0.249 ug/ml) followed by a ready to use Goat Anti-Rabbit IgG H&L (HRP polymer) (ab214880). Nucleolus staining on mouse testis. The section was incubated with ab314506 at 4°C overnight. Counterstained with Hematoxylin. Secondary antibody only control: Secondary antibody is a ready to use Goat Anti-Rabbit IgG H&L (HRP polymer) (ab214880). Heat mediated antigen retrieval was performed using ab93678 (citrate buffer, pH 6.0)



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Fibrillarin+Fibrillarin-like protein 1 antibody [RM1082] (ab314506)

Fibrillarin+Fibrillarin-like protein 1 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of Mouse liver using rabbit Anti-Fibrillarin+Fibrillarin-like protein 1 antibody

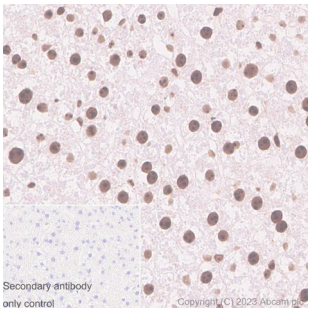
Immunohistochemical analysis of paraffin-embedded Mouse liver tissue labeling Fibrillarin with ab314506 at 1/2000 (0.249 ug/ml) followed by a ready to use Goat Anti-Rabbit IgG H&L (HRP polymer) (ab214880). Nucleolus staining on mouse liver. The section was incubated with ab314506 at 4°C overnight. Counterstained with Hematoxylin. Secondary antibody only control: Secondary antibody is a ready to use Goat Anti-Rabbit IgG H&L (HRP polymer) (ab214880). Heat mediated antigen retrieval was performed using ab93678 (citrate buffer, pH 6.0)



Immunocytochemistry/ Immunofluorescence - Anti-Fibrillarin+Fibrillarin-like protein 1 antibody [RM1082] (ab314506)

Fibrillarin+Fibrillarin-like protein 1 Immunocytochemistry/ Immunofluorescence staining of PC-12 (rat adrenal gland pheochromocytoma cell) using rabbit Anti-Fibrillarin+Fibrillarin-like protein 1 antibody

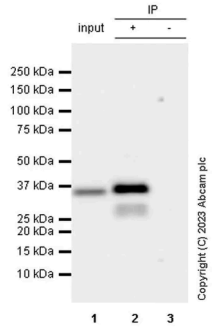
Immunofluorescent analysis of 100% methanol-fixed, 0.1% TritonX-100 permeabilized PC-12 (rat adrenal gland pheochromocytoma cell) cells labelling Fibrillarin with ab314506 at 1/500 (0.994 ug/ml) dilution, followed by ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed antibody at 1/1000 dilution (Green). Confocal image showing nucleolar staining in PC-12 cell line.Image was taken with a confocal microscope(Leica-Microsystems, TCS SP8). 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 ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 dilution.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Fibrillarin+Fibrillarin-like protein 1 antibody [RM1082] (ab314506)

Fibrillarin+Fibrillarin-like protein 1 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of Rat liver using rabbit Anti-Fibrillarin+Fibrillarin-like protein 1 antibody

Immunohistochemical analysis of paraffin-embedded Rat liver tissue labeling Fibrillarin with ab314506 at 1/2000 (0.249 ug/ml) followed by a ready to use Goat Anti-Rabbit IgG H&L (HRP polymer) (ab214880). Nucleolus staining on rat liver. The section was incubated with ab314506 at 4°C overnight. Counterstained with Hematoxylin. Secondary antibody only control: Secondary antibody is a ready to use Goat Anti-Rabbit IgG H&L (HRP polymer) (ab214880). Heat mediated antigen retrieval was performed using ab93678 (citrate buffer, pH 6.0)



Immunoprecipitation - Anti-Fibrillarin+Fibrillarin-like protein 1 antibody [RM1082] (ab314506)

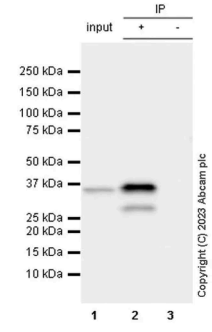
Fibrillarin was immunoprecipitated from 0.35 mg NIH/3T3 (mouse embryonic fibroblast) whole cell lysate with ab314506 at 1/30 dilution (2ug in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab314506 at 1/1000 dilution. VeriBlot for IP secondary antibody(HRP)(ab131366) was used at 1/5000 dilution. Lane 1: NIH/3T3 (mouse embryonic fibroblast) whole cell lysate Lane 2: ab314506 IP in NIH/3T3 (mouse embryonic fibroblast) whole cell lysate Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab314506 in NIH/3T3 whole cell lysate Blocking and dilution buffer and concentration: 5% NFDM/TBST. Lower band around 26kDa is supposed to be the degradation form of fibrillarin according to the literature (PMID: 31347059).
All lanes:
Immunoprecipitation - Anti-Fibrillarin+Fibrillarin-like protein 1 antibody [RM1082] (ab314506) at 1/30 dilution

All lanes:
NIH/3T3 (mouse embryonic fibroblast) whole cell lysate

Secondary

All lanes:
Immunoprecipitation - VeriBlot for IP Detection Reagent (HRP) (ab131366) at 1/5000 dilution

Exposure time: 5s



Immunoprecipitation - Anti-Fibrillarin+Fibrillarin-like protein 1 antibody [RM1082] (ab314506)

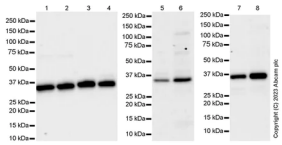
Fibrillarin was immunoprecipitated from 0.35 mg PC-12 (rat adrenal gland pheochromocytoma cell) whole cell lysate with ab314506 at 1/30 dilution (2ug in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab314506 at 1/1000 dilution. VeriBlot for IP secondary antibody(HRP)(ab131366) was used at 1/5000 dilution. Lane 1: PC-12 (rat adrenal gland pheochromocytoma cell) whole cell lysate Lane 2: ab314506 IP in PC-12 (rat adrenal gland pheochromocytoma cell) whole cell lysate Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab314506 in PC-12 whole cell lysate Blocking and dilution buffer and concentration: 5% NFDM/TBST. Lower band around 26kDa is supposed to be the degradation form of fibrillarin according to the literature (PMID: 31347059).
All lanes:
Immunoprecipitation - Anti-Fibrillarin+Fibrillarin-like protein 1 antibody [RM1082] (ab314506) at 1/30 dilution

All lanes:
PC-12 (rat adrenal gland pheochromocytoma cell) whole cell lysate

Secondary

All lanes:
Immunoprecipitation - VeriBlot for IP Detection Reagent (HRP) (ab131366) at 1/5000 dilution

Exposure time: 5s



Western blot - Anti-Fibrillarin+Fibrillarin-like protein 1 antibody [RM1082] (ab314506)

Fibrillarin+Fibrillarin-like protein 1 Western blot staining using rabbit Anti-Fibrillarin+Fibrillarin-like protein 1 antibody

Blocking and diluting buffer and concentration: 5% NFDM/TBST Lysates were freshly made and used for Western blotting immediately to minimize protein degradation. Exposure time: Lanes 1-4: 26 seconds；Lanes 5 and 6: 81 seconds；Lanes 7 and 8: 70 seconds
All lanes:
Western blot - Anti-Fibrillarin+Fibrillarin-like protein 1 antibody [RM1082] (ab314506) at 1/1000 dilution

Lane 1:
HeLa (human cervical adenocarcinoma epithelial cell) whole cell lysate at 20 µg

Lane 2:
293T (human embryonic kidney epithelial cell) whole cell lysate at 20 µg

Lane 3:
NIH/3T3 (mouse embryonic fibroblast) whole cell lysate at 20 µg

Lane 4:
PC-12 (rat adrenal gland pheochromocytoma cell) whole cell lysate at 20 µg

Lane 5:
Rat testis tissue lysate at 20 µg

Lane 6:
Rat spleen tissue lysate at 20 µg

Lane 7:
Mouse testis tissue lysate at 20 µg

Lane 8:
Mouse spleen tissue lysate at 20 µg

Secondary

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

Observed band size: 33 kDa

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