abcam

ab51366

Anti-PRPF8/Prp8 antibody [2834C1a]

Key facts

Isotype	IgG1
Host species	Mouse
Storage buffer	pH: 7.4 Preservative: 0.05% Sodium azide Constituents: PBS, 1% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	Recombinant Fragment Protein within Human PRPF8. The exact immunogen used to generate this antibody is proprietary information. Database link Q6P2Q9
Clone number	2834C1a
Purification technique	Affinity purification Protein G
Concentration	0.1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →
Purification notes	Filtered through a 0.22 µm membrane.

Reactivity data

IHC-P

Tested

Species	Human
Dilution info	5 µg/mL
Notes	Perform heat-mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Expected

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

Flow Cyt

Tested

Species	Human
Dilution info	2 µg for 10^6 Cells
Notes	ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.

Expected

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

WB

Tested

Species	Mouse
Dilution info	1/100
Notes	-

Species	Human
Dilution info	1/100
Notes	-

Target data

See full target information PRPF8

Function	Plays a role in pre-mRNA splicing as core component of precatalytic, catalytic and postcatalytic spliceosomal complexes, both of the predominant U2-type spliceosome and the minor U12-type spliceosome (PubMed:10411133, PubMed:11971955, PubMed:28076346, PubMed:28502770, PubMed:28781166, PubMed:29301961, PubMed:29360106, PubMed:29361316, PubMed:30315277, PubMed:30705154, PubMed:30728453). Functions as a scaffold that mediates the ordered assembly of spliceosomal proteins and snRNAs. Required for the assembly of the U4/U6-U5 tri-snRNP complex, a building block of the spliceosome. Functions as a scaffold that positions spliceosomal U2, U5 and U6 snRNAs at splice sites on pre-mRNA substrates, so that splicing can occur. Interacts with both the 5' and the 3' splice site.

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

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

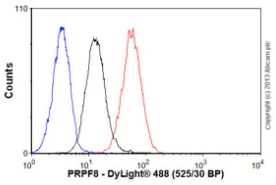
We do not recommend this combination. It is not covered by our product promise.

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.

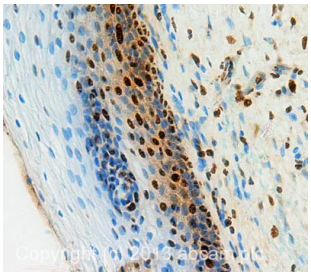
5 product images



Flow Cytometry - Anti-PRPF8/Prp8 antibody [2834C1a] (ab51366)

PRPF8/Prp8 Flow Cytometry staining using mouse Anti-PRPF8/Prp8 antibody

Overlay histogram showing HeLa cells stained with ab51366 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab51366, 2µg/1x10^6 cells) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) (ab96879) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG1 [ICIGG1] (ab91353, 2µg/1x10^6 cells) used under the same conditions. Unlabelled sample (blue line). Acquisition of >5,000 events were collected using a 20mW Argon ion laser (488nm) and 525/30 bandpass filter.

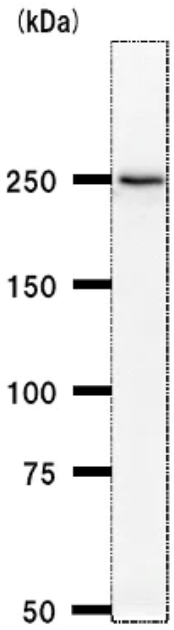


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PRPF8/Prp8 antibody [2834C1a] (ab51366)

PRPF8/Prp8 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using mouse Anti-PRPF8/Prp8 antibody

IHC image of PRPF8/Prp8 staining in Human Normal Cervix formalin fixed paraffin embedded tissue section, performed on a Leica Bond™ system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab51366, 5µg/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.



Western blot - Anti-PRPF8/Prp8 antibody [2834C1a] (ab51366)

All lanes:
Western blot - Anti-PRPF8/Prp8 antibody [2834C1a] (ab51366) at 1/100 dilution

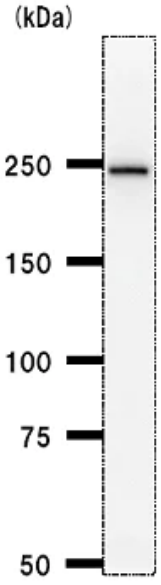
All lanes:
HeLa whole cell lysate at 25 µg

Secondary

All lanes:
Anti mouse IgG antibody at 1/2500 dilution

Predicted band size: 274 kDa

Observed band size: 250 kDa



Western blot - Anti-PRPF8/Prp8 antibody [2834C1a] (ab51366)

All lanes:
Western blot - Anti-PRPF8/Prp8 antibody [2834C1a] (ab51366) at 1/100 dilution

All lanes:
NIH3T3 whole cell lysate at 25 µg

Secondary

All lanes:
Anti mouse IgG antibody at 1/2500 dilution

Predicted band size: 274 kDa

Observed band size: 250 kDa

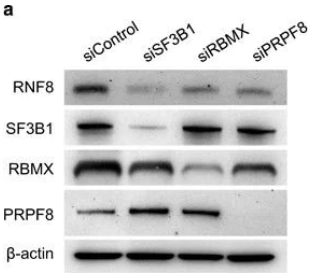


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Western blot - Anti-PRPF8/Prp8 antibody [2834C1a] (ab51366)

PRPF8/Prp8 western blot using anti-PRPF8/Prp8 antibody [2834C1a] ab51366. Publication image and figure legend from Pederiva, C., Bohm, S., et al., 2016, Cell Death Differ, PubMed 27315300.

ab51366 was used in this publication in western blot. This may not be the same as the application(s) guaranteed by Abcam. For a full list of applications guaranteed by Abcam for ab51366 please see the product overview.

When splicing-related factors are depleted, overexpression of RNF8 restores repair of DNA double-strand breaks. (a) Western blot of SF3B1, RBMX, PRPF8 and RNF8 in U2OS cells treated for 48 h with the siRNAs indicated. β-Actin was used as a loading control. (b) U2OS cells were transfected with the siRNAs indicated for 48 h, exposed to IR (6 Gy), and 1 h later, immunostained for γH2AX and conjugated ubiquitin (with the FK2 antibody). (c) U2OS cells were treated with the siRNAs indicated for 40 h, followed by transfection with either GFP-RNF8 or GFP-Empty plasmid for 7 h; exposure to IR (6 Gy) and fixation 1 h later and immunostaining for conjugated ubiquitin. The white numbers indicate the percentage of 100 transfected cells, i.e, green cells whose nuclei contained >10 IR-induced foci. Means±S.D. are shown, n=3. *P<0.05, as determined by a non-paired two-

tailed Student's t-test. (d) Schematic model of how splicing regulates repair of DNA double-strand breaks

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