

For Research Use Only

# AFG3L2 Polyclonal antibody

Catalog Number: 14631-1-AP

Featured Product

26 Publications



## Basic Information

### Catalog Number:

14631-1-AP

### Size:

150ul, Concentration: 650 µg/ml by Nanodrop;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG6209

### GenBank Accession Number:

BC065016

### GeneID (NCBI):

10939

### UNIPROT ID:

Q9Y4W6

### Full Name:

AFG3 ATPase family gene 3-like 2 (yeast)

### Calculated MW:

88 kDa

### Observed MW:

80-90 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:2000-1:16000

IP 0.5-4.0 µg for 1.0-3.0 mg of total protein lysate

IHC 1:100-1:400

IF 1:10-1:100

## Applications

### Tested Applications:

IF, IHC, IP, WB, ELISA

### Cited Applications:

IP, WB

### Species Specificity:

human, mouse, rat

### Cited Species:

human, mouse, zebrafish

### Positive Controls:

**WB**: HeLa cells, mouse skeletal muscle tissue, mouse kidney tissue, Jurkat cells, mouse brain tissue, mouse liver tissue, rat liver tissue

**IP**: HeLa cells,

**IHC**: human kidney tissue,

**IF**: HepG2 cells, HeLa cells

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

## Background Information

AFG3L2 is the catalytic subunit of the m-AAA protease, an ATP-dependent proteolytic complex of the mitochondrial inner membrane that degrades misfolded proteins and regulates ribosome assembly (PMID:17101804). Human AFG3L2 is an 80-kDa protein encoded by a 17-exon gene and highly and selectively expressed in human cerebellar Purkinje cells (PMID:20208537) and it can exist as a truncated 65 kDa protein (PMID:18337413). Defects in AFG3L2 are the cause of spinocerebellar ataxia type 28 (SCA28) and spastic ataxia autosomal recessive type 5 (SPAX5).

## Notable Publications

Author	Pubmed ID	Journal	Application
Uwe Richter	26504172	J Cell Biol	WB
Kah Ying Ng	34718584	Hum Mol Genet	WB
Hao Liu	36245295	EMBO J	WB,IP

## Storage

### Storage:

Store at -20°C. Stable for one year after shipment.

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

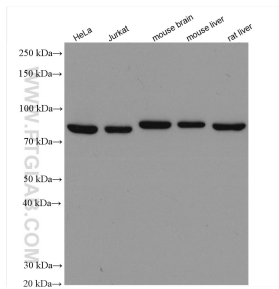
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

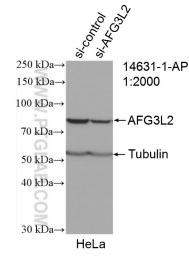
E: proteintech@ptglab.com  
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

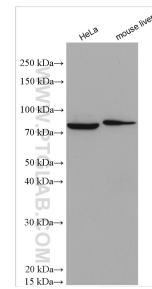
## Selected Validation Data



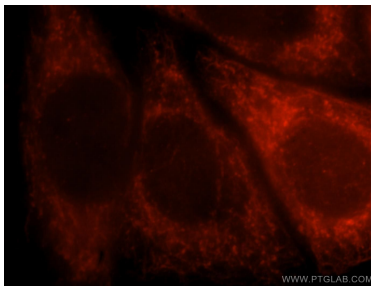
Various lysates were subjected to SDS PAGE followed by western blot with 14631-1-AP (AFG3L2 antibody) at dilution of 1:8000 incubated at room temperature for 1.5 hours.



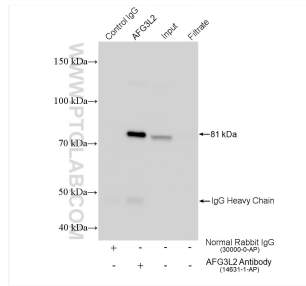
WB result of AFG3L2 antibody (14631-1-AP; 1:2000; incubated at room temperature for 1.5 hours) with sh-Control and sh-AFG3L2 transfected HeLa cells.



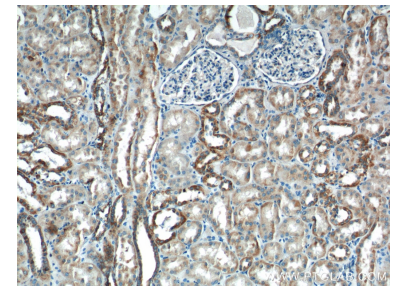
Various lysates were subjected to SDS PAGE followed by western blot with 14631-1-AP (AFG3L2 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



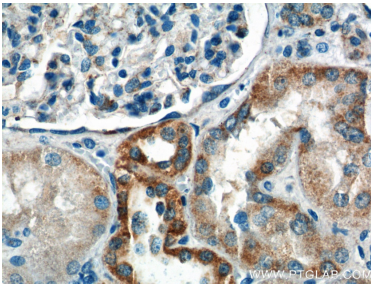
Immunofluorescent analysis of HepG2 cells, using AFG3L2 antibody 14631-1-AP at 1:25 dilution and Rhodamine-labeled goat anti-rabbit IgG (red).



IP result of anti-AFG3L2 (IP:14631-1-AP, 4ug; Detection:14631-1-AP 1:5000) with HeLa cells lysate 1560 ug.



Immunohistochemical analysis of paraffin-embedded human kidney tissue slide using 14631-1-AP (AFG3L2 Antibody) at dilution of 1:200 (under 10x lens).



Immunohistochemical analysis of paraffin-embedded human kidney tissue slide using 14631-1-AP (AFG3L2 Antibody) at dilution of 1:200 (under 40x lens).