

For Research Use Only

# AFG3L2 Polyclonal antibody

Catalog Number: 14631-1-AP

Featured Product

28 Publications



## Basic Information

### Catalog Number:

14631-1-AP

### Size:

150ul, Concentration: 650 ug/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 ug for 1.0-3.0 mg of total protein lysate

IHC 1:100-1:400

IF/ICC 1:10-1:100

## Applications

### Tested Applications:

WB, IHC, IF/ICC, IP, ELISA

### Cited Applications:

WB, IF, IP

### 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/ICC** : 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

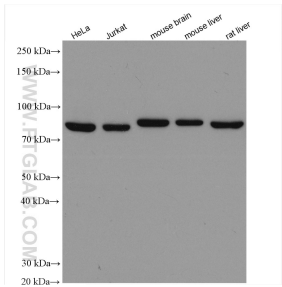
For technical support and original validation data for this product please contact:

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

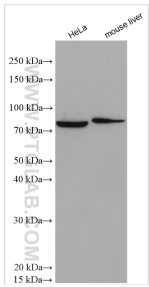
E: proteintech@ptglab.com  
W: ptglab.com

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

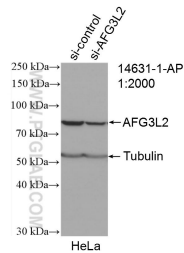
Selected Validation Data



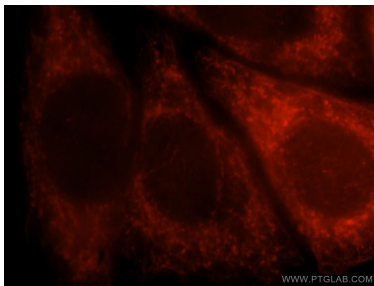
Various lysates were subjected to SDS PAGE followed by western blot with 14631-1-AP (AFG3L2 antibody) at dilution of 1:8000 incubated at room temperature for 1.5 hours.



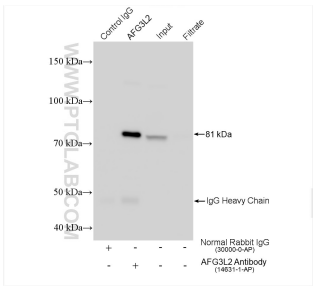
Various lysates were subjected to SDS PAGE followed by western blot with 14631-1-AP (AFG3L2 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



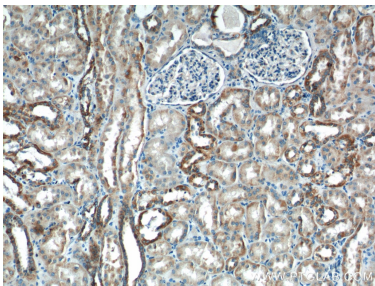
WB result of AFG3L2 antibody (14631-1-AP; 1:2000; incubated at room temperature for 1.5 hours) with sh-Control and sh-AFG3L2 transfected HeLa cells.



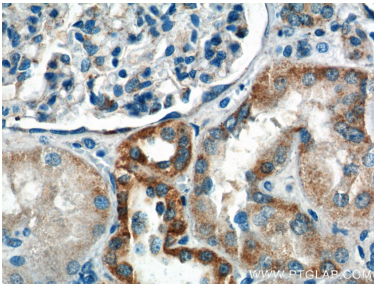
Immunofluorescent analysis of HepG2 cells, using AFG3L2 antibody 14631-1-AP at 1:25 dilution and Rhodamine-labeled goat anti-rabbit IgG (red).



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).