### For Research Use Only

# AFG3L2 Polyclonal antibody

Catalog Number: 14631-1-AP

**Featured Product** 

**26 Publications** 



**Basic Information** 

Catalog Number: GenBank Accession Number: 14631-1-AP BC065016 GeneID (NCBI): Size: 650 μg/ml 10939 **UNIPROT ID:** Source: Rabbit Q9Y4W6 Full Name:

Isotype: AFG3 ATPase family gene 3-like 2

(veast) Immunogen Catalog Number:

AG6209 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 1:10-1:100

**Applications** 

**Tested Applications:** IF/ICC, IHC, IP, WB, ELISA Cited Applications:

Species Specificity: human, mouse, rat **Cited Species:** human, mouse, zebrafish

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

buffer pH 6.0

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

# **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 exsit 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

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

Storage Buffer:

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

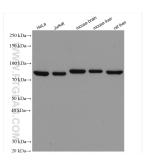
Aliquoting is unnecessary for -20°C storage

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

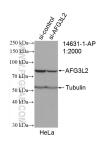
T: 4006900926 E: Proteintech-CN@ptglab.com

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

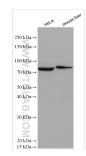
## **Selected Validation Data**



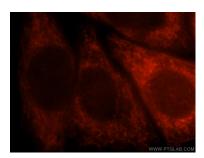
Various lysates were subjected to SDS PAGE followed by western blot with 14631-1-AP (AFG3L2 antibody) at dilution of 1:8000 incubated at room temperature for 1.5 hours.



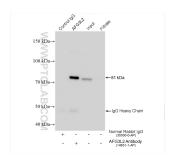
WB result of AFG3L2 antibody (14631-1-AP; 1:2000; incubated at room temperature for 1.5 hours) with sh-Control and sh-AFG3L2 transfected HeLa cells.



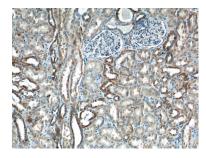
Various lysates were subjected to SDS PAGE followed by western blot with 14631-1-AP (AFG3L2 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



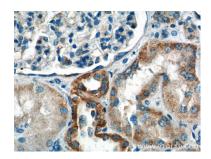
Immunofluorescent analysis of HepG2 cells, using AFG3L2 antibody 14631-1-AP at 1:25 dilution and Rhodamine-labeled goat anti-rabbit IgG (red).



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



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