

For Research Use Only

# SMN Polyclonal antibody

Catalog Number: 20451-1-AP

Featured Product



## Basic Information

### Catalog Number:

20451-1-AP

### Size:

350 µg/ml

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG14333

### GenBank Accession Number:

BC000908

### GeneID (NCBI):

6607

### UNIPROT ID:

Q16637

### Full Name:

survival of motor neuron 2,  
centromeric

### Calculated MW:

282 aa, 30 kDa

### Observed MW:

38 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:500-1:3000

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

IHC 1:50-1:200

IF/ICC 1:400-1:1600

## Applications

### Tested Applications:

IF/ICC, IHC, IP, WB, ELISA

### Species Specificity:

human, mouse

**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** : HEK-293 cells, Jurkat cells, HepG2 cells, HeLa  
cells, K-562 cells

**IP** : HEK-293 cells,

**IHC** : human kidney tissue, human heart tissue

**IF/ICC** : HepG2 cells,

## Background Information

Spinal muscular atrophy (SMA) is an autosomal recessive neurodegenerative disease characterized by loss of anterior horn cells in the spinal cord and concomitant symmetrical muscle weakness and atrophy (PMID: 16364894). SMA is caused by deletion or mutations of the survival motor neuron (SMN1) gene. SMA patients lack a functional SMN1 gene, but they possess an intact SMN2 gene, which though nearly identical to SMN1, is only partially functional (PMID: 17355180). A large majority of SMN2 transcripts lack exon 7, resulting in production of a truncated, less stable SMN protein (PMID: 10369862). The level of SMN protein correlates with phenotypic severity of SMA.

## 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

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

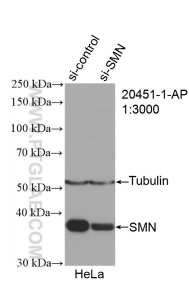
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

W: [ptgcn.com](http://ptgcn.com)

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

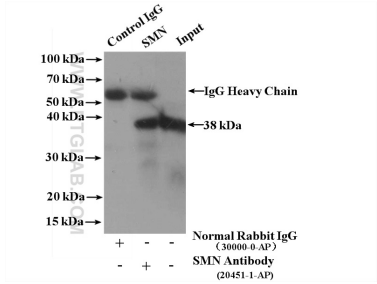
Selected Validation Data



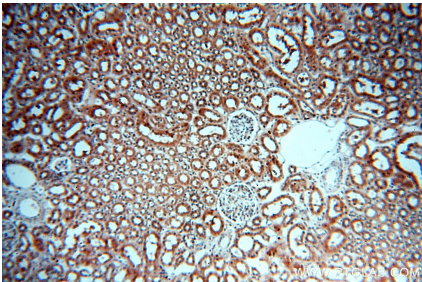
WB result of SMN antibody (20451-1-AP; 1:3000; incubated at room temperature for 1.5 hours) with sh-Control and sh-SMN transfected HeLa cells.



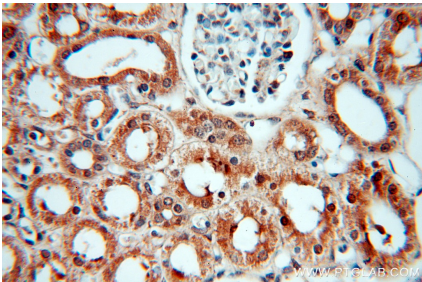
HEK-293 cells were subjected to SDS PAGE followed by western blot with 20451-1-AP (SMN antibody) at dilution of 1:800 incubated at room temperature for 1.5 hours.



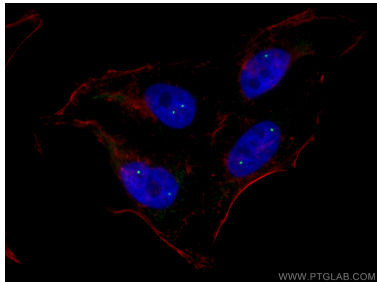
IP result of anti-SMN (IP:20451-1-AP, 4ug; Detection:20451-1-AP 1:300) with HEK-293 cells lysate 2000 ug.



Immunohistochemical analysis of paraffin-embedded human kidney using 20451-1-AP (SMN antibody) at dilution of 1:100 (under 10x lens).



Immunohistochemical analysis of paraffin-embedded human kidney using 20451-1-AP (SMN antibody) at dilution of 1:100 (under 40x lens).



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using SMN antibody (20451-1-AP) at dilution of 1:800 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), CL594-Phalloidin (red).