

For Research Use Only

# SMCR7L/MID51 Polyclonal antibody

Catalog Number: 20164-1-AP

Featured Product

73 Publications



## Basic Information

### Catalog Number:

20164-1-AP

### Concentration:

600 µg/ml

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG13775

### GenBank Accession Number:

BC002587

### GeneID (NCBI):

54471

### UNIPROT ID:

Q9NQG6

### Full Name:

Smith-Magenis syndrome  
chromosome region, candidate 7-like

### Calculated MW:

463 aa, 51 kDa

### Observed MW:

48-51 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:500-1:2000

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

## Applications

### Tested Applications:

WB, IP, ELISA

### Cited Applications:

WB, IHC, IF, IP

### Species Specificity:

human, mouse, rat

### Cited Species:

human, mouse, rat, pig, monkey

### Positive Controls:

WB: A549 cells, mouse testis tissue, NIH/3T3 cells,  
RAW264.7, HEK-293T cells, HT-1080 cells

IP: RAW 264.7 cells,

## Background Information

Human SMCR7L gene encodes, MID51, the mitochondrial dynamic protein of 51 kDa (also called mitochondrial elongation factor 1, MIEF1). MID51 is a single-pass membrane protein anchored to the mitochondrial outer membrane and regulates mitochondrial morphology. Mitochondrial morphology is controlled by two opposing processes: fusion and fission. Elevated MID51 levels induce extensive mitochondrial fusion, whereas depletion of MID51 causes mitochondrial fragmentation. MID51 interacts with and recruits Drp1 to mitochondria, suggesting a critical role of MID51 in regulation of mitochondrial fusion-fission machinery in vertebrates.

## Notable Publications

Author	Pubmed ID	Journal	Application
William T King	34529976	J Biol Chem	WB
Dandan Liu	36083519	Mol Neurobiol	WB
Di Hu	34489447	Nat Commun	WB

## Storage

### Storage:

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

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol

Aliquoting is unnecessary for -20°C storage

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

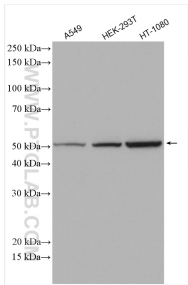
T: 4006900926

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

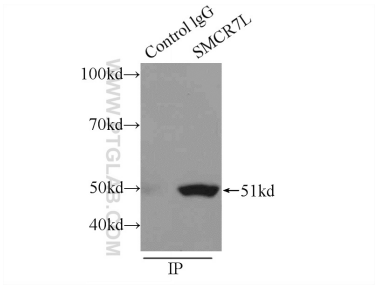
W: [ptgcn.com](http://ptgcn.com)

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# Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 20164-1-AP (SMCR7L/MID51 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



IP result of anti-SMCR7L/MID51 (IP:20164-1-AP, 3ug; Detection:20164-1-AP 1:1000) with RAW 264.7 cells lysate 2400ug.