For Research Use Only

SMCR7L/MID51 Polyclonal antibody

Catalog Number: 20164-1-AP

Featured Product

65 Publications



Basic Information

Applications

Catalog Number: 20164-1-AP Size: 600 µg/ml Source: Rabbit

Isotype: IgG

Immunogen Catalog Number:

AG13775

U13//3

Tested Applications:

IP, WB, ELISA
Cited Applications:
FC, IF, IHC, IP, WB
Species Specificity:
human, mouse, rat
Cited Species:

human, rat, mouse, monkey, pig

GenBank Accession Number:

BC002587 GeneID (NCBI): 54471 UNIPROT ID: Q9NQG6

Smith-Magenis syndrome

chromosome region, candidate 7-like

Calculated MW: 463 aa, 51 kDa

Full Name:

Observed MW: 48-51 kDa

Positive Controls:

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

Purification Method:

WB 1:500-1:2000

protein lysate

Antigen affinity purification

IP 0.5-4.0 ug for 1.0-3.0 mg of total

Recommended Dilutions:

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:

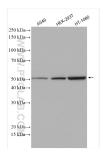
Store at -20°C. Stable for one year after shipment.

Storage Buffer:

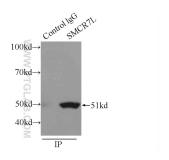
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

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.