For Research Use Only

SMCR7L/MID51 Monoclonal antibody

Catalog Number:67808-1-Ig

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Antibodies | ELISA kits | Proteins
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Basic Information

Catalog Number:
67808-1-Ig

Size:
150ul , Concentration: 1000 ug/ml by Nanodrop;

Source:
Mouse

Isotype:
IgG2b

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:
Protein A purification

CloneNo.:
3B3G3

Recommended Dilutions:
WB 1:5000-1:50000
IHC 1:250-1:1000
IF-P 1:200-1:800

Applications

Tested Applications:
WB, IHC, IF-P, ELISA

Species Specificity:
Human, mouse , rat

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 : LNCaP cells, HeLa cells, HEK-293 cells, Jurkat cells, K-562 cells, PC-12 cells, NIH/3T3 cells, 4T1 cells, HSC-T6 cells

IHC : mouse testis tissue,

IF-P : mouse testis tissue,

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.

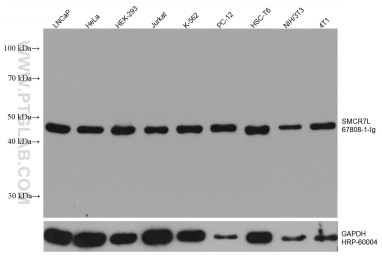
Storage

Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.1% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

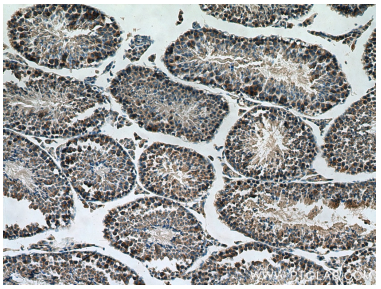
***** 20ul sizes contain 0.1% BSA**

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

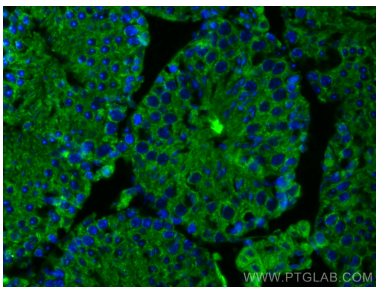
Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 67808-1-Ig (SMCR7L/MID51 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated GAPDH Monoclonal antibody (HRP-60004) as loading control.



Immunohistochemical analysis of paraffin-embedded mouse testis tissue slide using 67808-1-Ig (SMCR7L/MID51 antibody) at dilution of 1:500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed mouse testis tissue using SMCR7L/MID51 antibody (67808-1-Ig, Clone: 3B3G3) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).