

# SMCR7L Monoclonal antibody, PBS Only

Catalog Number: **67808-1-PBS**

## Basic Information

**Catalog Number:**

67808-1-PBS

**Size:**

1 mg/ml

**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

## Applications

**Tested Applications:**

WB, IF, IHC, Indirect ELISA

**Species Specificity:**

Human, mouse, rat

## 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:**

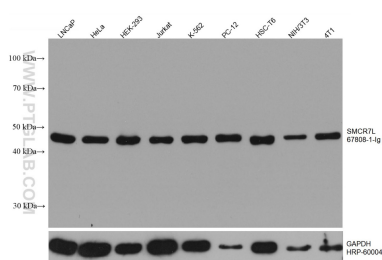
Store at -80°C.

**The product is shipped with ice packs. Upon receipt, store it immediately at -80°C**

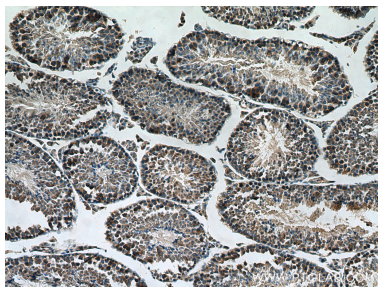
**Storage Buffer:**

PBS Only

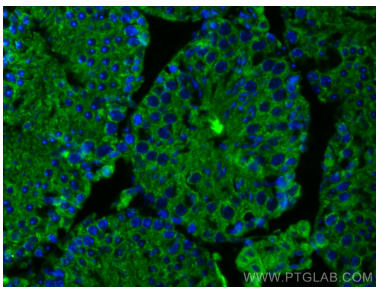
## Selected Validation Data



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. This data was developed using the same antibody clone with 67808-1-PBS in a different storage buffer formulation.



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). This data was developed using the same antibody clone with 67808-1-PBS in a different storage buffer formulation.



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). This data was developed using the same antibody clone with 67808-1-PBS in a different storage buffer formulation.