

# SMCR7L Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP5571a

#### **Product Information**

ApplicationWB, EPrimary AccessionQ9NQG6Other AccessionNP\_061881.2ReactivityHuman, Mouse

HostRabbitClonalityPolyclonalIsotypeRabbit IgGClone NamesRB26921Calculated MW51293Antigen Region105-132

### **Additional Information**

**Gene ID** 54471

Other Names Mitochondrial dynamics protein MID51, Mitochondrial dynamics protein of 51

kDa, Mitochondrial elongation factor 1, Smith-Magenis syndrome chromosomal region candidate gene 7 protein-like, SMCR7-like protein,

MIEF1, MID51, SMCR7L

Target/Specificity This SMCR7L antibody is generated from rabbits immunized with a KLH

conjugated synthetic peptide between 105-132 amino acids from the

N-terminal region of human SMCR7L.

**Dilution** WB~~1:1000 E~~Use at an assay dependent concentration.

**Format** Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide.

This antibody is purified through a protein A column, followed by peptide

affinity purification.

**Storage** Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store

at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions** SMCR7L Antibody (N-term) is for research use only and not for use in

diagnostic or therapeutic procedures.

#### **Protein Information**

Name MIEF1 ( HGNC:25979)

**Function** Mitochondrial outer membrane protein which regulates mitochondrial

fission/fusion dynamics (PubMed:21701560, PubMed:23921378, PubMed:33632269). Promotes the recruitment and association of the fission mediator dynamin-related protein 1 (DNM1L) to the mitochondrial surface independently of the mitochondrial fission FIS1 and MFF proteins. Regulates DNM1L GTPase activity and DNM1L oligomerization. Binds ADP and can also bind GDP, although with lower affinity. Does not bind CDP, UDP, ATP, AMP or GTP. Inhibits DNM1L GTPase activity in the absence of bound ADP. Requires ADP to stimulate DNM1L GTPase activity and the assembly of DNM1L into long, oligomeric tubules with a spiral pattern, as opposed to the ring-like DNM1L oligomers observed in the absence of bound ADP. Does not require ADP for its function in recruiting DNM1L.

**Cellular Location** Mitochondrion outer membrane; Single-pass membrane protein

**Tissue Location** Expression is relatively high in heart, skeletal muscle, pancreas and kidney.

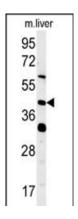
## **Background**

SMCR7L belongs to the SMCR7 family. The specific function of this protein remains unknown.

#### References

Jin, J., et al. Curr. Biol. 14(16):1436-1450(2004) Simpson, J.C., et al. EMBO Rep. 1(3):287-292(2000) Dunham, I., et al. Nature 402(6761):489-495(1999)

## **Images**



SMCR7L Antibody (N-term) (Cat. #AP5571a) western blot analysis in mouse liver tissue lysates (15ug/lane). This demonstrates the SMCR7L antibody detected SMCR7L protein (arrow).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.