

For Research Use Only

# MCU/CCDC109A Polyclonal antibody

Catalog Number: 26312-1-AP

Featured Product

27 Publications



## Basic Information

### Catalog Number:

26312-1-AP

### Size:

150ul, Concentration: 550 ug/ml by Nanodrop and 347 ug/ml by Bradford method using BSA as the standard;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG24733

### GenBank Accession Number:

BC034235

### GeneID (NCBI):

90550

### UNIPROT ID:

Q8NE86

### Full Name:

coiled-coil domain containing 109A

### Calculated MW:

35 kDa

### Observed MW:

30-35 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:2000-1:12000

IHC 1:50-1:500

## Applications

### Tested Applications:

WB, IHC, ELISA

### Cited Applications:

WB, IHC, IF, IP

### Species Specificity:

human, mouse

### Cited Species:

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 : HeLa cells, mouse brain tissue, rat brain tissue, HepG2 cells

IHC : mouse kidney tissue,

## Background Information

MCU, also known as CCDC109A, is highly conserved across all eukaryotes. The MCU protein is composed of two coiled-coil domains, two TMDs, and a short motif of amino acids between the two TMDs. Knockdown of MCU dramatically reduces mitochondrial  $Ca^{2+}$  uptake in isolated mitochondria, in permeabilized cells and living cells. MCU has 3 isoforms with MW 40,37 and 35 kDa (refer to UniProt). The observed MW of MCU is mainly between 30 to 35 kDa in paper (PMID: 26341627; 28337252).

## Notable Publications

Author	Pubmed ID	Journal	Application
Yun-Fei Yang	34845191	Cell Death Dis	WB
Qin Zhou	33957982	Stem Cell Res Ther	WB
Giovanni Quarato	35726022	Cell Death Differ	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

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

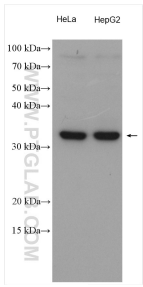
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

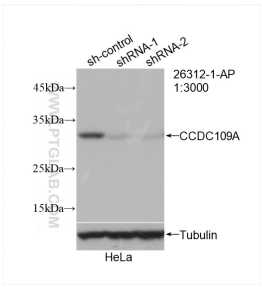
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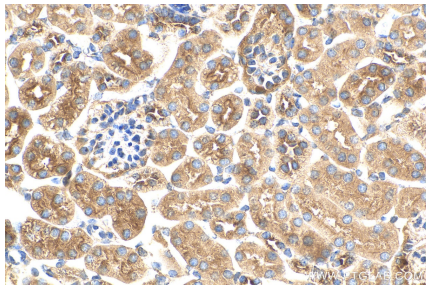
Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 26312-1-AP (MCU/CCDC109A antibody) at dilution of 1:6000 incubated at room temperature for 1.5 hours.



WB result of MCU/CCDC109A antibody (26312-1-AP; 1:3000; incubated at room temperature for 1.5 hours) with sh-Control and sh-MCU/CCDC109A transfected HeLa cells.



Immunohistochemical analysis of paraffin-embedded mouse kidney tissue slide using 26312-1-AP (MCU/CCDC109A antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).