

For Research Use Only

MCU/CCDC109A Polyclonal antibody



Catalog Number: 26312-1-AP

Featured Product

19 Publications

Basic Information

Catalog Number:

26312-1-AP

Size:

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

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG24733

GenBank Accession Number:

BC034235

GeneID (NCBI):

90550

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:

IHC, WB, ELISA

Cited Applications:

IF, IHC, WB

Species Specificity:

human, mouse

Cited Species:

human, rat, mouse

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 Ca²⁺ 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

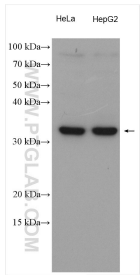
For technical support and original validation data for this product please contact:

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

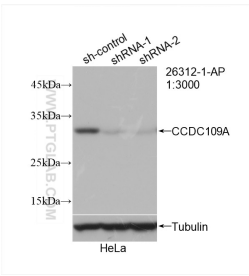
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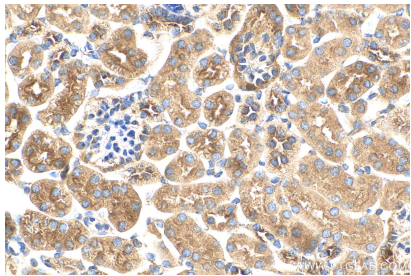
Selected Validation Data



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).