For Research Use Only

## MCU/CCDC109A Recombinant antibody

Catalog Number:86274-1-RR



**Purification Method:** 

**Basic Information** 

Catalog Number: GenBank Accession Number:

86274-1-RR BC034235 Protein A purification

GeneID (NCBI): Size: CloneNo.: 100ul , Concentration: 1000  $\mu g/ml$  by 90550 250879C3

Nanodrop: **UNIPROT ID:** Recommended Dilutions: Q8NE86 WB: 1:5000-1:50000

Rabbit Full Name:

Isotype: coiled-coil domain containing 109A

IgG Calculated MW: Immunogen Catalog Number: 35 kDa AG24733 Observed MW: 30-35 kDa

**Applications** 

**Tested Applications: Positive Controls:** 

WB, ELISA WB: HeLa cells, HepG2 cells, PANC-1 cells, A549 cells, Species Specificity: NIH/3T3 cells, mouse skeletal muscle tissue

human, mouse

**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).

Storage

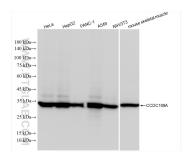
Store at -20°C. Stable for one year after shipment.

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

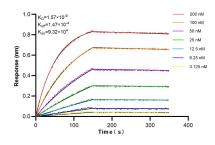
Aliquoting is unnecessary for -20°C storage

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

## **Selected Validation Data**



Various lysates were subjected to SDS PAGE followed by western blot with 86274-1-RR (CCDC 109A antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



Biolayer interferometry (BLI) kinetic assays of 86274-1-RR against Human MCU/CCDC 109A were performed. The affinity constant is 1.57 nM.