For Research Use Only

TIMM44 Recombinant antibody, PBS Only

Catalog Number:85134-5-PBS



Basic Information

Catalog Number:

GenBank Accession Number:

Purification Method:

85134-5-PBS

GeneID (NCBI):

Protein A purification

Size:

100ug, Concentration: 1 mg/ml by 10469 CloneNo.:

242774A4

Nanodrop;

UNIPROT ID:

BC033628

Source Rabbit

043615

Isotype

translocase of inner mitochondrial membrane 44 homolog (yeast)

IgG Immunogen Catalog Number:

Calculated MW:

AG4834

452 aa, 51 kDa

Observed MW:

45 kDa

Applications

Tested Applications:

WB, IF/ICC, Indirect ELISA

Species Specificity:

human, mouse

Background Information

Translocase of inner mitochondrial membrane 44 (TIMM44), also known as MIMT44 and TIM44, belongs to the Tim44 family. TIMM44 is a mitochondrial protein located at the inner mitochondrial membrane, which is crucial for the integrity and function of mitochondria. In an ATP-dependent manner, TIMM44 anchors mitochondrial heat shock protein 70 to the translocase of the mitochondrial inner membrane 23 (TIMM23) complex. TIMM44 is essential for mitochondrial pre-protein import into the mitochondrial matrix. TIMM44 is vital for the integrity and function of $mit ochondria.\ TIMM44 silencing\ disrupted\ mit ochondrial\ functions\ in\ endothelial\ cells,\ causing\ mit ochondrial\ mi$ protein input arrest, ATP reduction, ROS production, and mitochondrial depolarization, and leading to apoptosis activation (PMID: 36438483, PMID: 37147302, PMID: 38467612). The observed molecular weight of TIMM44 is 45 kDa, indicating a mature form of TIMM44 (PMID: 33891006).

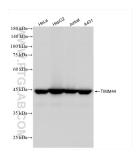
Storage

Storage: Store at -80°C. Storage Buffer:

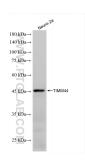
PBS Only

in USA), or 1(312) 455-8498 (outside USA)

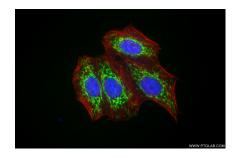
Selected Validation Data



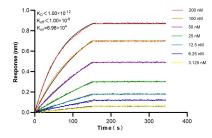
Various lysates were subjected to SDS PAGE followed by western blot with 85134-5-RR (TIMM44 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 85134-5-PBS in a different storage buffer formulation.



Neuro-2a cells were subjected to SDS PAGE followed by western blot with 85134-5-RR (TIMM44 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 85134-5-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using TIMM44 antibody (85134-5-RR, Clone: 242774A4) at dilution of 1:1000 and Coralite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red). This data was developed using the same antibody clone with 85134-5-PBS in a different storage buffer formulation.



Biolayer interferometry (BLI) kinetic assays of 85134-5-RR against Human TIMM44 were performed. The affinity constant is below 1 pM.