

For Research Use Only

TIMM44 Recombinant antibody

Catalog Number: 85134-5-RR



Basic Information

Catalog Number: 85134-5-RR	GenBank Accession Number: BC033628	Purification Method: Protein A purification
Size: 100ul , Concentration: 1000 µg/ml by Nanodrop;	GeneID (NCBI): 10469	CloneNo.: 242774A4
Source: Rabbit	UNIPROT ID: O43615	Recommended Dilutions: WB 1:5000-1:50000 IF/ICC 1:500-1:2000
Isotype: IgG	Full Name: translocase of inner mitochondrial membrane 44 homolog (yeast)	
Immunogen Catalog Number: AG4834	Calculated MW: 452 aa, 51 kDa Observed MW: 45 kDa	

Applications

Tested Applications: WB, IF/ICC, ELISA	Positive Controls:
Species Specificity: human, mouse	WB : HeLa cells, Neuro-2a cells, HepG2 cells, Jurkat cells, A431 cells IF/ICC : HepG2 cells,

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 mitochondria. TIMM44 silencing disrupted mitochondrial functions in endothelial cells, causing mitochondrial 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

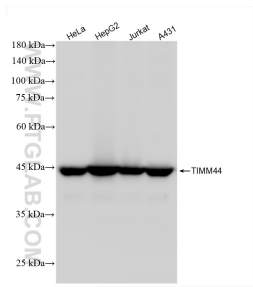
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

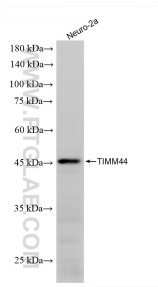
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

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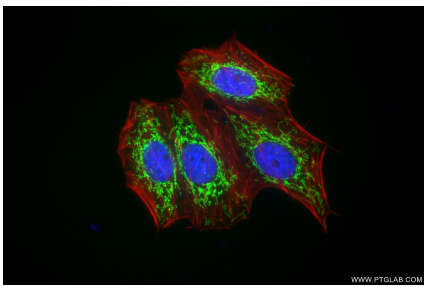
Selected Validation Data



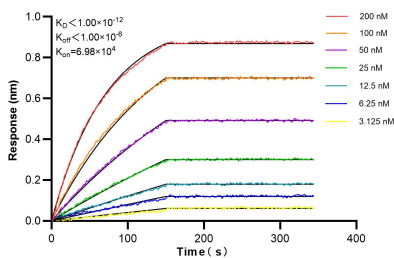
Various lysates were subjected to SDS PAGE followed by western blot with 85134-5-RR (TIMM44 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



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.



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).



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