

For Research Use Only

TIMM44 Recombinant antibody, PBS Only

Catalog Number: 85134-6-PBS



Basic Information

Catalog Number: 85134-6-PBS	GenBank Accession Number: BC033628	Purification Method: Protein A purification
Size: 100ug , Concentration: 1 mg/ml by Nanodrop;	GeneID (NCBI): 10469	CloneNo.: 242774F9
Source: Rabbit	UNIPROT ID: O43615	
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, FC (Intra), Indirect ELISA

Species Specificity:
human, mouse, rat

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 import 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

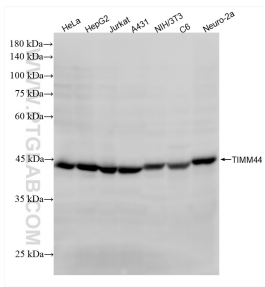
Storage:
Store at -80°C.

Storage Buffer:
PBS only, pH7.3

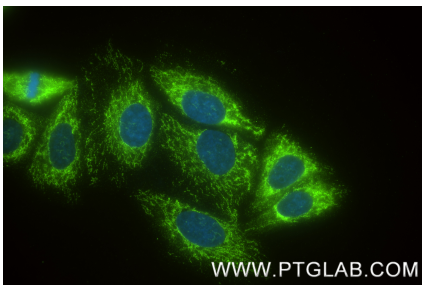
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

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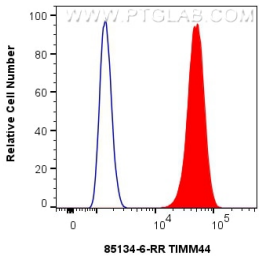
Selected Validation Data



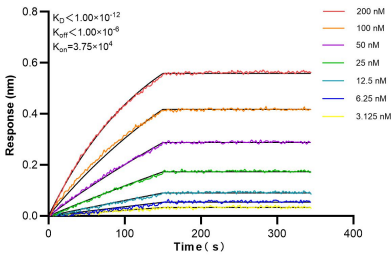
Various lysates were subjected to SDS PAGE followed by western blot with 85134-6-RR (TIMM44 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 85134-6-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using TIMM44 antibody (85134-6-RR, Clone: 242774F9) at dilution of 1:2000 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). This data was developed using the same antibody clone with 85134-6-PBS in a different storage buffer formulation.



1x10⁶ HepG2 cells were intracellularly stained with 0.25 ug Timm44 Recombinant Antibody (85134-6-RR, Clone:242774F9) and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2)(red), or 0.25 ug Rabbit IgG Isotype Control RecAb (98136-1-RR, Clone: 240953C9) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C). This data was developed using the same antibody clone with 85134-6-PBS in a



Biolayer interferometry (BLI) kinetic assays of 85134-6-RR against Human TIMM44 were performed. The affinity constant is below 1 pM.