

For Research Use Only

# TIMM44 Recombinant antibody

Catalog Number: 85134-5-RR



## Basic Information

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

## Applications

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

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

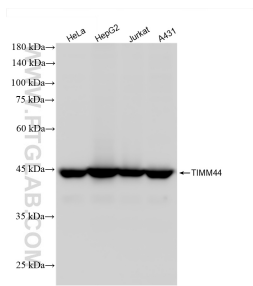
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

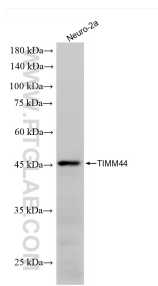
W: [ptgcn.com](http://ptgcn.com)

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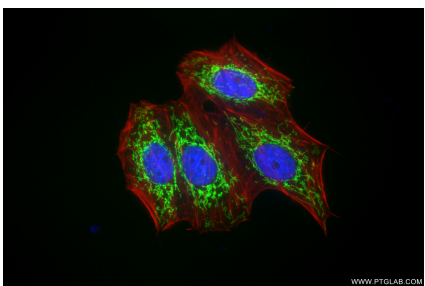
## Selected Validation Data



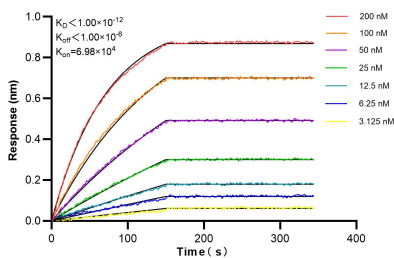
Various lysates were subjected to SDS PAGE followed by western blot with 85134-5-RR (TIMM44 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



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.