

For Research Use Only

# CoraLite® Plus 647-conjugated TIMM44 Recombinant antibody

Catalog Number: CL647-85134-5



## Basic Information

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|--|---|---|
| <b>Catalog Number:</b><br>CL647-85134-5                        | <b>GenBank Accession Number:</b><br>BC033628  | <b>Purification Method:</b><br>Protein A purification             |
| <b>Size:</b><br>100ul , Concentration: 1000 ug/ml by Nanodrop; | <b>GeneID (NCBI):</b><br>10469  | <b>CloneNo.:</b><br>242774A4                                      |
| <b>Source:</b><br>Rabbit                                       | <b>UNIPROT ID:</b><br>O43615  | <b>Recommended Dilutions:</b><br>IF/ICC: 1:50-1:500               |
| <b>Isotype:</b><br>IgG   | <b>Full Name:</b><br>translocase of inner mitochondrial membrane 44 homolog (yeast) | <b>Excitation/Emission maxima wavelengths:</b><br>654 nm / 674 nm |
| <b>Immunogen Catalog Number:</b><br>AG4834                     | <b>Calculated MW:</b><br>452 aa, 51 kDa   |   |
|  | <b>Observed MW:</b><br>45 kDa   |   |

## Applications

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| <b>Tested Applications:</b><br>IF/ICC       | <b>Positive Controls:</b><br>IF/ICC : HepG2 cells, |
| <b>Species Specificity:</b><br>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 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

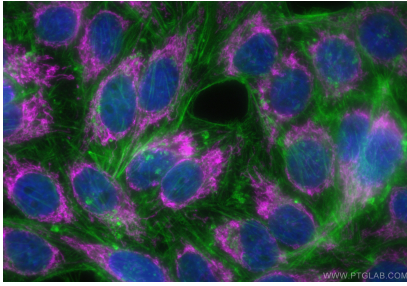
**Storage:**  
Store at -20°C. Avoid exposure to light. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 50% glycerol, 0.05% Proclin300, 0.5% BSA, pH7.3  
**Aliquoting is unnecessary for -20°C storage**

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](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

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## Selected Validation Data



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using CoraLite® Plus 647 TIMM44 antibody (CL647-85134-5, Clone: 242774A4 ) at dilution of 1:200, CL488-phalloidin (green).