For Research Use Only

## CoraLite®594-conjugated TIMM44 Recombinant antibody

Catalog Number: CL594-85134-5



**Basic Information** 

Catalog Number: CL594-85134-5 Concentration:

1000 ug/ml Source: Rabbit Isotype:

Immunogen Catalog Number:

AG4834

GenBank Accession Number:

BC033628 GeneID (NCBI): 10469 **UNIPROT ID:** 043615

translocase of inner mitochondrial membrane 44 homolog (yeast)

Calculated MW: 452 aa, 51 kDa Observed MW: 45 kDa

**Purification Method:** 

Protein A purification

CloneNo.: 242774A4

**Recommended Dilutions:** 

IF/ICC: 1:50-1:500

Excitation/Emission maxima

wavelengths: 588 nm / 604 nm

**Applications** 

**Tested Applications:** 

Species Specificity: human, mouse

Positive Controls:

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).

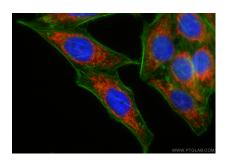
Storage

Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

PBS with 50% glycerol, 0.05% Proclin300, 0.5% BSA, pH7.3

Aliquoting is unnecessary for -20°C storage

## Selected Validation Data



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using Coralite®594 TIMM44 antibody (CL594-85134-5, Clone: 242774A4) at dilution of 1:200, CL488-phalloidin (green).