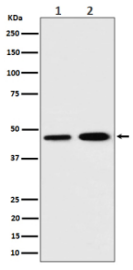
TIMM44 Antibody / Translocase of inner mitochondrial membrane 44 [clone 30T70] (FY12027)

Catalog No.	Formulation	Size
FY12027	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA	100 ul

Recombinant RABBIT MONOCLONAL

Bulk quote request

Availability	2-3 weeks
Species Reactivity	Human, Rat
Format	Liquid
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	30T70
Purity	Affinity-chromatography
Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
UniProt	O43615
Applications	Western Blot : 1:500-1:2000 Immunocytochemistry/Immunofluorescence : 1:50-1:200 Immunoprecipitation : 1:50 Flow Cytometry : 1:50
Limitations	This TIMM44 antibody is available for research use only.



Western blot analysis of TIMM44 expression in (1) human K562 cell lysate; (2) rat C6 cell lysate using TIMM44 antibody. Predicted molecular weight ~51 kDa, commonly observed at 45-51 kDa.

Description

TIM44 antibody recognizes translocase of inner mitochondrial membrane 44, a central component of the mitochondrial protein import machinery. TIM44 anchors mitochondrial Hsp70 to the inner membrane, enabling preprotein translocation through the TIM23 complex. By facilitating proper protein targeting, TIM44 ensures mitochondrial biogenesis and maintenance of energy production.

Research using TIM44 antibody has highlighted its importance in mitochondrial function and human disease. Altered expression of TIM44 can impair protein import, leading to mitochondrial stress and metabolic dysfunction. Dysregulation has been linked to neurodegenerative conditions, where defective energy metabolism is a hallmark, and to metabolic syndromes associated with impaired mitochondrial quality control.

Validated clones for TIM44 detection are suitable for western blot, immunofluorescence, and immunohistochemistry. These reagents allow investigators to track mitochondrial protein import efficiency and examine changes in response to cellular stress. Monitoring TIM44 levels provides valuable insight into how cells adapt to demands on mitochondrial biogenesis and oxidative metabolism.

NSJ Bioreagents offers this TIM44 antibody to support studies in mitochondrial biology, metabolic regulation, and disease. Alternate names include translocase of inner mitochondrial membrane 44 antibody, mitochondrial import receptor subunit TIM44 antibody, and HSP-binding protein antibody.

Application Notes

Optimal dilution of the TIMM44 antibody should be determined by the researcher.

Immunogen

A synthesized peptide derived from human TIM44 was used as the immunogen for the TIMM44 antibody.

Storage

Store the TIMM44 antibody at -20oC.