

KD-Validated Anti-TIMM50 Rabbit Monoclonal Antibody

Rabbit monoclonal antibody Catalog # AGI1881

Specification

KD-Validated Anti-TIMM50 Rabbit Monoclonal Antibody - Product Information

Application WB, FC, ICC Primary Accession 03ZC08

Reactivity Rat, Human, Mouse

Clonality Monoclonal Isotype Rabbit IgG

Calculated MW Predicted, 40 kDa; Observed, 36 kDa KDa

Gene Name TIMM50

Aliases TIMM50; Translocase Of Inner

Mitochondrial Membrane 50; TIM50; TIM50L; Mitochondrial Import Inner Membrane Translocase Subunit TIM50; Translocase Of Inner Mitochondrial

Membrane 50 Homolog (Yeast); Homolog Of Yeast Tim50; Tim50-Like Protein;

MGCA9

Immunogen A synthesized peptide derived from human

TIM50

KD-Validated Anti-TIMM50 Rabbit Monoclonal Antibody - Additional Information

Gene ID 92609

Other Names

Mitochondrial import inner membrane translocase subunit TIM50, TIMM50, TIM50

KD-Validated Anti-TIMM50 Rabbit Monoclonal Antibody - Protein Information

Name TIMM50

Synonyms TIM50

Function

Essential component of the TIM23 complex, a complex that mediates the translocation of transit peptide-containing proteins across the mitochondrial inner membrane (PubMed:30190335, PubMed:38828998). Has some phosphatase activity in vitro; however such activity may not be relevant in vivo.

Cellular Location

Mitochondrion inner membrane; Single-pass membrane protein

Tissue Location

Widely expressed. Expressed at higher level in brain, kidney and liver (at protein level)

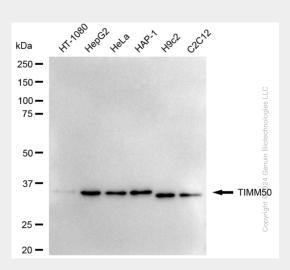


KD-Validated Anti-TIMM50 Rabbit Monoclonal Antibody - Protocols

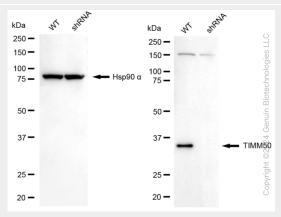
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

KD-Validated Anti-TIMM50 Rabbit Monoclonal Antibody - Images



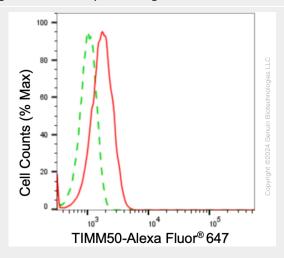
Western blotting analysis using anti-TIMM50 antibody (Cat#63361). Total cell lysates (30 μ g) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-TIMM50 antibody (Cat#63361, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (Cat#201, 1:20,000) respectively. Image was developed using NaQ $^{\text{TM}}$ ECL Substrate Kit (Cat#716).



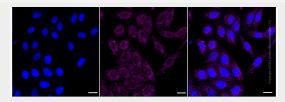
Western blotting analysis using anti-TIMM50 antibody (Cat#63361). TIMM50 expression in wild-type (WT) and TIMM50 shRNA knockdown (KD) HeLa cells with 20 μ g of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-TIMM50 antibody (Cat#63361, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (Cat#201,



1:20,000) respectively. Image was developed using NaQ™ ECL Substrate Kit (Cat#716).



Flow cytometric analysis of TIMM50 expression in HepG2 cells using anti-TIMM50 antibody (Cat#63361, 1:2,000). Green, isotype control; red, TIMM50.



Immunocytochemical staining of HepG2 cells with anti-TIMM50 antibody (Cat#63361, 1:1,000). Nuclei were stained blue with DAPI; TIMM50 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Low. Scale bar: $20~\mu m$.