

KD-Validated Anti-MFN1 Rabbit Monoclonal Antibody
Rabbit monoclonal antibody
Catalog # AGI1872**Specification****KD-Validated Anti-MFN1 Rabbit Monoclonal Antibody - Product Information**

Application	WB, FC
Primary Accession	Q8IWA4
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Isotype	Rabbit IgG
Calculated MW	Predicted, 84 kDa, observed, 75 kDa kDa
Gene Name	MFN1
Aliases	MFN1; Mitofusin 1; Transmembrane GTPase MFN1; Mitofusin-1; Fzo Homolog; FLJ20693; Mitochondrial Transmembrane GTPase FZO-2; Mitochondrial Transmembrane GTPaseFzo-1; Putative Transmembrane GTPase; EC 3.6.5.-; EC 3.6.5; Hfzo1; Hfzo2
Immunogen	A synthesized peptide derived from rat Mitofusin 1(UniProt Entry: Q8R4Z9)

KD-Validated Anti-MFN1 Rabbit Monoclonal Antibody - Additional Information

Gene ID	55669
Other Names	
Mitofusin-1, 3.6.5.-, Fzo homolog, Transmembrane GTPase MFN1, MFN1	

KD-Validated Anti-MFN1 Rabbit Monoclonal Antibody - Protein Information**Name** MFN1**Function**

Mitochondrial outer membrane GTPase that mediates mitochondrial clustering and fusion (PubMed: [12475957](http://www.uniprot.org/citations/12475957), PubMed: [12759376](http://www.uniprot.org/citations/12759376), PubMed: [27920125](http://www.uniprot.org/citations/27920125), PubMed: [28114303](http://www.uniprot.org/citations/28114303)). Membrane clustering requires GTPase activity (PubMed: [27920125](http://www.uniprot.org/citations/27920125)). It may involve a major rearrangement of the coiled coil domains (PubMed: [27920125](http://www.uniprot.org/citations/27920125), PubMed: [28114303](http://www.uniprot.org/citations/28114303)). Mitochondria are highly dynamic organelles, and their morphology is determined by the equilibrium between mitochondrial fusion and fission events (PubMed: [12475957](http://www.uniprot.org/citations/12475957), PubMed: [12759376](http://www.uniprot.org/citations/12759376)).

Overexpression induces the formation of mitochondrial networks (in vitro) (PubMed:12759376). Has low GTPase activity (PubMed:27920125, PubMed:28114303).

Cellular Location

Mitochondrion outer membrane; Multi-pass membrane protein

Tissue Location

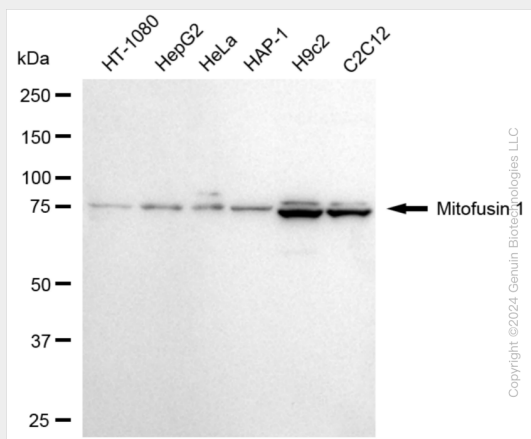
Detected in kidney and heart (at protein level) (PubMed:12759376). Ubiquitous (PubMed:11950885, PubMed:12759376) Expressed at slightly higher level in kidney and heart (PubMed:12759376). Isoform 2 may be overexpressed in some tumors, such as lung cancers (PubMed:11751411).

KD-Validated Anti-MFN1 Rabbit Monoclonal Antibody - Protocols

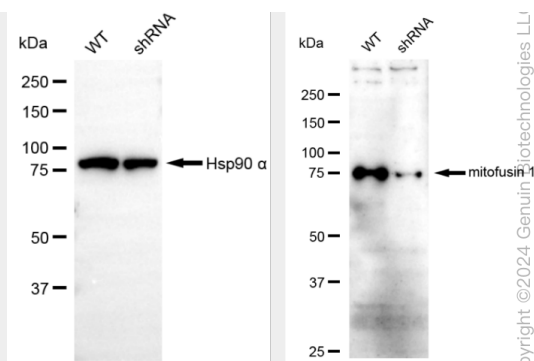
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

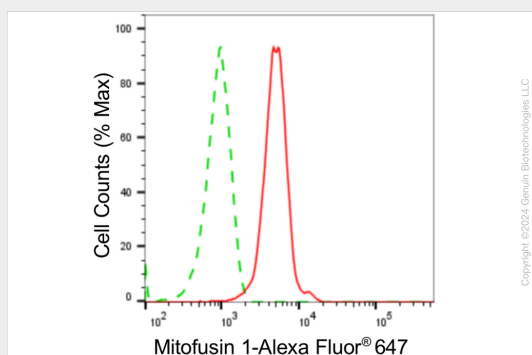
KD-Validated Anti-MFN1 Rabbit Monoclonal Antibody - Images



Western blotting analysis using anti-mitofusin 1 antibody (Cat#AGI1872). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-mitofusin 1 antibody (Cat#AGI1872, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Western blotting analysis using anti-mitofusin 1 antibody (Cat#AGI1872). Mitofusin 1 expression in wild-type (WT) and mitofusin 1 (MFN1) shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. β-Tubulin serves as a loading control. The blot was incubated with anti-mitofusin 1 antibody (Cat#AGI1872, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of Mitofusin 1 expression in C2C12 cells using anti-Mitofusin 1 antibody (Cat#AGI1872, 1:2,000). Green, isotype control; red, Mitofusin 1.