10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Mitofusin1 Antibody

Rabbit mAb
Catalog # AP91045

Product Information

Application	WB, FC, IP
Primary Accession	Q8IWA4
Reactivity	Human
Clonality	Monoclonal
Other Names	MFN1; Fzo homolog; Hfzo2; Mitofusin-1; Hfzo1; Mitofusin1;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	84160

Additional Information

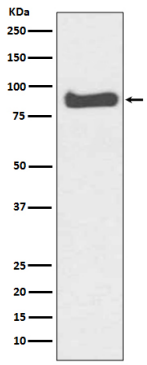
Dilution	WB 1:1000~1:5000 IP 1:20 FC 1:20
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human Mitofusin1
Description	Mitofusins are mitochondrial transmembrane GTPases that function to regulate mitochondrial fusion, a process that occurs in concert with mitochondrial division and is necessary for the maintenance of structural and genetic mitochondrial integrity. Two mitofusins have been described in mammals, mitofusin-1 and -2, which share 60% amino acid identity and appear to function coordinately to regulate mitochondrial fusion.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

Protein Information

Name	MFN1
Function	Mitochondrial outer membrane GTPase that mediates mitochondrial clustering and fusion (PubMed:12475957, PubMed:12759376, PubMed:27920125, PubMed:28114303). Membrane clustering requires GTPase activity (PubMed:27920125). It may involve a major rearrangement of the coiled coil domains (PubMed:27920125, PubMed:28114303). Mitochondria are highly dynamic organelles, and their morphology is determined by the equilibrium between mitochondrial fusion and fission events (PubMed:12475957, PubMed: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).

Images



Western blot analysis of Mitofusin1 expression in K562 cell lysate.