

**Mfn2 Polyclonal Antibody**  
**Catalog # AP70923****Specification****Mfn2 Polyclonal Antibody - Product Information**

Application	WB, IHC-P
Primary Accession	<a href="#">O95140</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal

**Mfn2 Polyclonal Antibody - Additional Information****Gene ID** 9927**Other Names**

MFN2; CPRP1; KIAA0214; Mitofusin-2; Transmembrane GTPase MFN2

**Dilution**

WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/40000. Not yet tested in other applications.

IHC-P~~N/A

**Format**

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

**Storage Conditions**

-20°C

**Mfn2 Polyclonal Antibody - Protein Information****Name** MFN2 {ECO:0000303|PubMed:12598526, ECO:0000312|HGNC:HGNC:16877}**Function**

Mitochondrial outer membrane GTPase that mediates mitochondrial clustering and fusion (PubMed:<a href="http://www.uniprot.org/citations/11181170" target="\_blank">11181170</a>, PubMed:<a href="http://www.uniprot.org/citations/11950885" target="\_blank">11950885</a>, PubMed:<a href="http://www.uniprot.org/citations/19889647" target="\_blank">19889647</a>, PubMed:<a href="http://www.uniprot.org/citations/26214738" target="\_blank">26214738</a>, PubMed:<a href="http://www.uniprot.org/citations/28114303" target="\_blank">28114303</a>). Mitochondria are highly dynamic organelles, and their morphology is determined by the equilibrium between mitochondrial fusion and fission events (PubMed:<a href="http://www.uniprot.org/citations/28114303" target="\_blank">28114303</a>). Overexpression induces the formation of mitochondrial networks (PubMed:<a href="http://www.uniprot.org/citations/28114303" target="\_blank">28114303</a>). Membrane clustering requires GTPase activity and may involve a major rearrangement of the coiled coil domains (Probable). Plays a central role in mitochondrial metabolism and may be associated with obesity and/or apoptosis processes (By similarity). Plays an important role in the regulation of

vascular smooth muscle cell proliferation (By similarity). Involved in the clearance of damaged mitochondria via selective autophagy (mitophagy) (PubMed:<a href="http://www.uniprot.org/citations/23620051" target="\_blank">23620051</a>). Is required for PRKN recruitment to dysfunctional mitochondria (PubMed:<a href="http://www.uniprot.org/citations/23620051" target="\_blank">23620051</a>). Involved in the control of unfolded protein response (UPR) upon ER stress including activation of apoptosis and autophagy during ER stress (By similarity). Acts as an upstream regulator of EIF2AK3 and suppresses EIF2AK3 activation under basal conditions (By similarity).

#### Cellular Location

Mitochondrion outer membrane; Multi-pass membrane protein Note=Colocalizes with BAX during apoptosis

#### Tissue Location

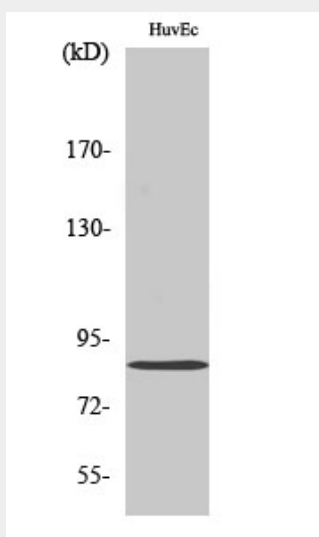
Ubiquitous; expressed at low level. Highly expressed in heart and kidney.

### Mfn2 Polyclonal 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](#)

### Mfn2 Polyclonal Antibody - Images



### Mfn2 Polyclonal Antibody - Background

Mitochondrial outer membrane GTPase that mediates mitochondrial clustering and fusion (PubMed:11181170, PubMed:11950885, PubMed:28114303). Mitochondria are highly dynamic

organelles, and their morphology is determined by the equilibrium between mitochondrial fusion and fission events (PubMed:28114303). Overexpression induces the formation of mitochondrial networks (PubMed:28114303). Membrane clustering requires GTPase activity and may involve a major rearrangement of the coiled coil domains (Probable). Plays a central role in mitochondrial metabolism and may be associated with obesity and/or apoptosis processes (By similarity). Plays an important role in the regulation of vascular smooth muscle cell proliferation (By similarity). Involved in the clearance of damaged mitochondria via selective autophagy (mitophagy) (PubMed:23620051). Is required for PRKN recruitment to dysfunctional mitochondria (PubMed:23620051). Involved in the control of unfolded protein response (UPR) upon ER stress including activation of apoptosis and autophagy during ER stress (By similarity). Acts as an upstream regulator of EIF2AK3 and suppresses EIF2AK3 activation under basal conditions (By similarity).