

**Mitofusin 2 Blocking Peptide**  
**Catalog # PBV10407b****Specification**

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**Mitofusin 2 Blocking Peptide - Product Information**

Primary Accession	<a href="#">O95140</a>
Other Accession	<a href="#">EAW71727</a>
Gene ID	9927
Calculated MW	86402

**Mitofusin 2 Blocking Peptide - Additional Information****Gene ID 9927****Application & Usage**

The peptide is used for blocking the antibody activity of Mitofusin 2. It usually blocks the antibody activity completely in Western blot analysis by incubating the peptide with equal volume of antibody for 30-60 minutes at 37°C.

**Other Names**

Mitofusin-2, 3.6.5.-, Transmembrane GTPase MFN2, MFN2, CPRP1, KIAA0214

**Target/Specificity**

Mitofusin 2

**Formulation**

50 µg (0.5 mg/ml) in phosphate buffered saline (PBS), pH 7.2, containing 50% glycerol, 1% BSA and 0.02% thimerosal.

**Reconstitution & Storage**

-20 °C

**Background Descriptions****Precautions**

Mitofusin 2 Blocking Peptide is for research use only and not for use in diagnostic or therapeutic procedures.

**Mitofusin 2 Blocking Peptide - 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/26214738" target="\_blank">26214738</a>, PubMed:<a href="http://www.uniprot.org/citations/28114303" target="\_blank">28114303</a>, PubMed:<a href="http://www.uniprot.org/citations/19889647" target="\_blank">19889647</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.

### **Mitofusin 2 Blocking Peptide - 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](#)

### **Mitofusin 2 Blocking Peptide - Images**