

**AIF Rabbit mAb**  
Catalog # AP78592**Specification****AIF Rabbit mAb - Product Information**

Application	<b>WB, IHC-P, FC, IP, ICC</b>
Primary Accession	<b><a href="#">O95831</a></b>
Reactivity	<b>Human, Mouse, Rat</b>
Host	<b>Rabbit</b>
Clonality	<b>Monoclonal Antibody</b>
Calculated MW	<b>66901</b>

**AIF Rabbit mAb - Additional Information****Gene ID** 9131**Other Names**

AIFM1

**Dilution**WB~~1:1000  
IHC-P~~N/A  
FC~~1:10~50  
IP~~N/A  
ICC~~N/A**Format**

10mM PBS, pH 7.4, 150mM sodium chloride, 0.05% BSA, 0.02% sodium azide and 50% glycerol.

**Storage**

Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

**AIF Rabbit mAb - Protein Information****Name** AIFM1 ([HGNC:8768](#))**Synonyms** AIF, PDCD8**Function**

Functions both as NADH oxidoreductase and as regulator of apoptosis (PubMed:<a href="http://www.uniprot.org/citations/17094969" target="\_blank">17094969</a>, PubMed:<a href="http://www.uniprot.org/citations/20362274" target="\_blank">20362274</a>, PubMed:<a href="http://www.uniprot.org/citations/23217327" target="\_blank">23217327</a>, PubMed:<a href="http://www.uniprot.org/citations/33168626" target="\_blank">33168626</a>). In response to apoptotic stimuli, it is released from the mitochondrion intermembrane space into the cytosol and to the nucleus, where it functions as a proapoptotic factor in a caspase- independent pathway (PubMed:<a href="http://www.uniprot.org/citations/20362274" target="\_blank">20362274</a>). Release into the cytoplasm is mediated upon binding to poly-ADP-ribose chains (By similarity). The

soluble form (AIFsol) found in the nucleus induces 'parthanatos' i.e. caspase-independent fragmentation of chromosomal DNA (PubMed:<a href="http://www.uniprot.org/citations/20362274" target="\_blank">20362274</a>). Binds to DNA in a sequence-independent manner (PubMed:<a href="http://www.uniprot.org/citations/27178839" target="\_blank">27178839</a>). Interacts with EIF3G, and thereby inhibits the EIF3 machinery and protein synthesis, and activates caspase-7 to amplify apoptosis (PubMed:<a href="http://www.uniprot.org/citations/17094969" target="\_blank">17094969</a>). Plays a critical role in caspase-independent, pyknotic cell death in hydrogen peroxide-exposed cells (PubMed:<a href="http://www.uniprot.org/citations/19418225" target="\_blank">19418225</a>). In contrast, participates in normal mitochondrial metabolism. Plays an important role in the regulation of respiratory chain biogenesis by interacting with CHCHD4 and controlling CHCHD4 mitochondrial import (PubMed:<a href="http://www.uniprot.org/citations/26004228" target="\_blank">26004228</a>).

### Cellular Location

Mitochondrion intermembrane space. Mitochondrion inner membrane. Cytoplasm. Nucleus. Cytoplasm, perinuclear region. Note=Proteolytic cleavage during or just after translocation into the mitochondrial intermembrane space (IMS) results in the formation of an inner-membrane-anchored mature form (AIFmit). During apoptosis, further proteolytic processing leads to a mature form, which is confined to the mitochondrial IMS in a soluble form (AIFsol). AIFsol is released to the cytoplasm in response to specific death signals, and translocated to the nucleus, where it induces nuclear apoptosis (PubMed:15775970). Release into the cytoplasm is mediated upon binding to poly-ADP-ribose chains (By similarity) Translocation into the nucleus is promoted by interaction with (auto- poly-ADP-ribosylated) processed form of PARP1 (PubMed:33168626) Colocalizes with EIF3G in the nucleus and perinuclear region (PubMed:17094969). {ECO:0000250|UniProtKB:Q9Z0X1, ECO:0000269|PubMed:15775970, ECO:0000269|PubMed:17094969, ECO:0000269|PubMed:33168626} [Isoform 4]: Mitochondrion. Cytoplasm, cytosol. Note=In pro-apoptotic conditions, is released from mitochondria to cytosol in a calpain/cathepsin-dependent manner.

### Tissue Location

Expressed in all tested tissues (PubMed:16644725). Detected in muscle and skin fibroblasts (at protein level) (PubMed:23217327). Expressed in osteoblasts (at protein level) (PubMed:28842795). [Isoform 4]: Expressed in all tested tissues except brain.

### AIF Rabbit mAb - 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](#)

### AIF Rabbit mAb - Images