

## Rabbit AIFM2 Polyclonal Antibody | anti-AIFM2 antibody

AIFM2 (IN) Antibody

| CATALOG # | HOST   | REACTIVITY        | APPLICATIONS                                                  |
|-----------|--------|-------------------|---------------------------------------------------------------|
| AAA11045  | Rabbit | Human, Mouse, Rat | ELISA, Immunohistochemistry, Western Blot, Immunofluorescence |

### PRODUCT SYNONYMS

AIFM2; Polyclonal Antibody; AIFM2 (IN) Antibody; AIFM2; apoptosis inducing factor mitochondria associated; anti-AIFM2 antibody

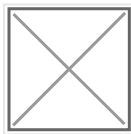
### PRODUCT SPECIFICATIONS

|                                                 |                                                                                                                                                                                                                                                                          |
|-------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Host                                            | Rabbit                                                                                                                                                                                                                                                                   |
| Reactivity                                      | Human, Mouse, Rat                                                                                                                                                                                                                                                        |
| Clonality                                       | Polyclonal                                                                                                                                                                                                                                                               |
| Isotype                                         | IgG                                                                                                                                                                                                                                                                      |
| Purity/Purification                             | AIFM2 Antibody is affinity chromatography purified via peptide column.                                                                                                                                                                                                   |
| Form/Format                                     | Liquid; AIFM2 Antibody is supplied in PBS containing 0.02% sodium azide.                                                                                                                                                                                                 |
| Concentration                                   | 1mg/mL (varies by lot)                                                                                                                                                                                                                                                   |
| Applicable Applications for anti-AIFM2 antibody | ELISA, IHC (Immunohistochemistry), WB (Western Blot), IF (Immunofluorescence)                                                                                                                                                                                            |
| Application Notes                               | WB: 2ug/mL; IHC: 1ug/mL; IF: 20ug/mL. Antibody validated: Western Blot in human, mouse and rat samples; Immunofluorescence in human samples and Immunohistochemistry in human, mouse and rat samples. All other applications and species not yet tested.                 |
| Immunogen                                       | Anti-AIFM2 antibody ( 9655) was raised against a peptide corresponding to 14 amino acids near the center of human AIFM2. The immunogen is located within 130-180 amino acids of AIFM2.                                                                                   |
| Homology                                        | Predicted species reactivity based on immunogen sequence: Gorilla (100%); chimpanzee (100%), cow (100%), Horse (93%)                                                                                                                                                     |
| Research Area                                   | Signal Transduction                                                                                                                                                                                                                                                      |
| NCBI Organism                                   | Homo sapiens                                                                                                                                                                                                                                                             |
| Isoforms                                        | Human AIFM2 has 2 isoforms, including isoform 1 (373aa, 40.5kD) and isoform 2 (336aa, 36.5kD). Mouse AIFM2 has 2 isoforms, isoform 1 (373aa, 40.6kD) and isoform 2 (380aa, 41.4kD). Rat AIFM2 has one isoform (373aa, 40.7kD). can detect AIFM2 in human, mouse and rat. |
| Preparation and Storage                         | AIFM2 antibody can be stored at 4 degree C for three months and -20 degree C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.              |

IMAGES



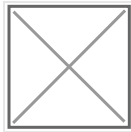
**IHC (Immunohistochemistry)**  
Figure 7: Immunohistochemistry Validation of AIFM2 in Rat BrainImmunohistochemical analysis of paraffin-embedded rat brain tissue using anti-AIFM2 antibody (AAA11045) at 1ug/mL. Tissue was fixed with formaldehyde and blocked with 10% serum for 1 h at RT; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody overnight at 4 degree C. A goat anti-rabbit IgG H&L (HRP) at 1/250 was used as secondary. Counter stained with Hematoxylin.



**IHC (Immunohistochemistry)**  
Figure 6: Immunohistochemistry Validation of AIFM2 in Mouse BrainImmunohistochemical analysis of paraffin-embedded mouse brain tissue using anti-AIFM2 antibody (AAA11045) at 1ug/mL. Tissue was fixed with formaldehyde and blocked with 10% serum for 1 h at RT; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody overnight at 4 degree C. A goat anti-rabbit IgG H&L (HRP) at 1/250 was used as secondary. Counter stained with Hematoxylin.



**IHC (Immunohistochemistry)**  
Figure 5: Immunohistochemistry Validation of AIFM2 in Human BrainImmunohistochemical analysis of paraffin-embedded human brain tissue using anti-AIFM2 antibody (AAA11045) at 1ug/mL. Tissue was fixed with formaldehyde and blocked with 10% serum for 1 h at RT; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody overnight at 4 degree C. A goat anti-rabbit IgG H&L (HRP) at 1/250 was used as secondary. Counter stained with Hematoxylin.



**IF (Immunofluorescence)**  
Figure 4: Immunofluorescence Validation of AIFM2 in HeLa CellsImmunofluorescent analysis of 4% paraformaldehyde-fixed HeLa cells labeling AIFM2 with AAA11045 at 20ug/mL, followed by goat anti-rabbit IgG secondary antibody at 1/500 dilution (green) and DAPI staining (blue).



**WB (Western Blot)**  
Figure 3: WB Validation in Rat TissuesLoading: 15ug of lysate. Antibodies: AIFM2 AAA11045, 2ug/mL, 1h incubation at RT in 5% NFDN/TBST. Secondary: Goat Anti-Rabbit IgG HRP conjugate at 1:10,000 dilution.



**WB (Western Blot)**  
Figure 2: WB Validation in Mouse Skeletal MuscleLoading: 15ug of lysate. Antibodies: AIFM2 AAA11045, 2ug/mL, 1h incubation at RT in 5% NFDN/TBST. Secondary: Goat Anti-Rabbit IgG HRP conjugate at 1:10,000 dilution.

ADDITIONAL INFORMATION

|                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|-----------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Related Product Information for anti-AIFM2 antibody | AIFM2 Antibody: AIFM2 blocks ferroptosis independent of ubiquinol metabolism. AIFM2 is a key component of a non-mitochondrial CoQ antioxidant system that acts in parallel to the canonical glutathione-based GPX4 pathway. AIFM2 confers protection against ferroptosis elicited by GPX4 deletion. AIF-2 was found to be upregulated in human glioma tissues and cell lines. Downregulation of AIF-2 reduced cell proliferation and induced G1 cell cycle arrest. AIF and its family member protein, AMID, are rotenone-sensitive NADH:ubiquinone oxidoreductases (of the NDH-2 type). AIF-M2 lessens survival cell signaling in the presence of foreign (e.g. bacterial and (retro)viral) cytosolic DNA, thus contributing to the onset of apoptosis |
| Product Categories/Family for anti-AIFM2 antibody   | Primary Antibodies                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| References                                          | Dai et al. Biochem Biophys Res Commun. 2020; 523(4):966-971<br>Bersuker et al. Nature 2019; 575(7784):688-692<br>Doll et al. Nature 2019; 575(7784):693-698<br>Chen et al. J Mol Neurosci 2019; 68(2): 304-310<br>Gong et al. J Biol Chem 2007; 282(41):30331-30340                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

NCBI AND UNIPROT INFORMATION

|                           |                |
|---------------------------|----------------|
| NCBI GI #                 | 74752283       |
| NCBI GeneID               | 84883          |
| NCBI Accession #          | NP_001185625.1 |
| NCBI GenBank Nucleotide # | NM_001198696.1 |

|                                  |                                                                                                                                                                                                                                  |
|----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| UniProt Accession #              | <a href="#">Q9BRQ8</a> ; <a href="#">Q63Z39</a> ; <a href="#">B3KXI0</a>                                                                                                                                                         |
| Molecular Weight                 | 40,527 Da                                                                                                                                                                                                                        |
| NCBI Official Full Name          | apoptosis-inducing factor 2                                                                                                                                                                                                      |
| NCBI Official Synonym Full Names | apoptosis-inducing factor, mitochondrion-associated, 2                                                                                                                                                                           |
| NCBI Official Symbol             | AIFM2                                                                                                                                                                                                                            |
| NCBI Official Synonym Symbols    | AMID; PRG3; RP11-367H5.2                                                                                                                                                                                                         |
| NCBI Protein Information         | apoptosis-inducing factor 2; p53-responsive gene 3 protein; apoptosis-inducing factor (AIF)-like mitochondrion-associated inducer of death; apoptosis-inducing factor (AIF)-homologous mitochondrion-associated inducer of death |
| UniProt Protein Name             | Apoptosis-inducing factor 2                                                                                                                                                                                                      |
| UniProt Gene Name                | <b>AIFM2</b>                                                                                                                                                                                                                     |
| UniProt Synonym Gene Names       | AMID; PRG3                                                                                                                                                                                                                       |
| UniProt Entry Name               | AIFM2_HUMAN                                                                                                                                                                                                                      |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/aifm2-antibody-immunohistochemistry-western-blot-immunofluorescence-elisa/11045>