

[KD Validated] Anti-AIFM1 Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

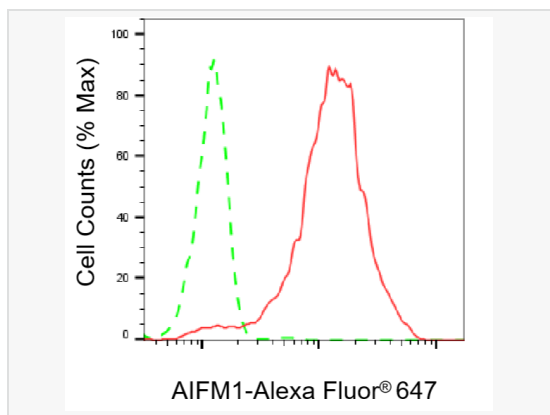
Catalog # R021517

Product Information

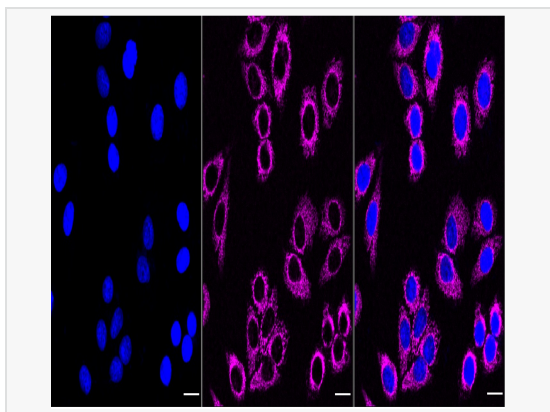
Application	WB, FC, IF (Cell)/ICC, IHC-P/IF (Tissue-P)
Reactivity	Human, Mouse, Rat
Dilution	WB 1:1,000~1:5,000; FC 1:200~1:2,000; IF 1:100~1:1,000; IHC-P 1:100~1:200
Host	Rabbit
Clonality	Monoclonal
Clone No.	60P43T46
Isotype	IgG
Label	Unconjugated
Immunogen	A synthesized peptide derived from human AIF
Format	Affinity purified monoclonal antibody supplied in PBS with 0.02% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 12 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	[KD Validated] Anti-AIFM1 Rabbit mAb [60P43T46] is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

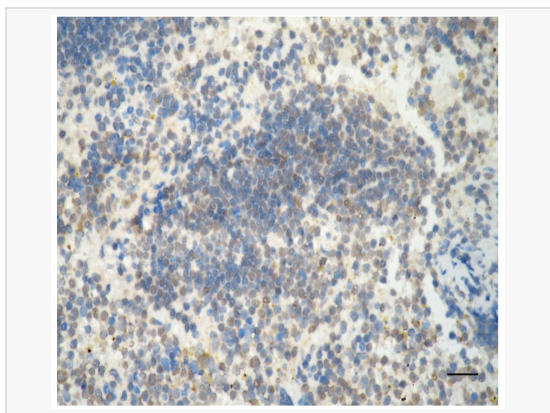
Synonyms	AIFM1; Apoptosis Inducing Factor Mitochondria Associated 1; AIF; CMTX4; DFNX5; PDCD8; Apoptosis-Inducing Factor, Mitochondrion-Associated, 1; Programmed Cell Death 8 (Apoptosis-Inducing Factor); Apoptosis-Inducing Factor 1, Mitochondrial; Auditory Neuropathy, X-Linked Recessive 1; AUNX1; NAMS1; Neuropathy, Axonal, Motor-Sensory With Deafness And Mental Retardation (Cowchock Syndrome); Apoptosis Inducing Factor, Mitochondria Associated 1; Striatal Apoptosis-Inducing Factor; Testicular Secretory Protein Li 4; Programmed Cell Death Protein 8; EC 1.6.99.-; COXPD6; SEMDHL; CMT2D; COWCK; NADMR.
Calculated MW	Calculated MW: 67 kDa, Observed MW: 67 kDa
Uniprot ID	O95831
Gene ID	9131
Background	This gene encodes a flavoprotein essential for nuclear disassembly in apoptotic cells, and it is found in the mitochondrial intermembrane space in healthy cells. Induction of apoptosis results in the translocation of this protein to the nucleus where it affects chromosome condensation and fragmentation. In addition, this gene product induces mitochondria to release the apoptogenic proteins cytochrome c and caspase-9. Mutations in this gene cause combined oxidative phosphorylation deficiency 6 (COXPD6), a severe mitochondrial encephalomyopathy, as well as Cowchock syndrome, also known as X-linked recessive Charcot-Marie-Tooth disease-4 (CMTX-4), a disorder resulting in neuropathy, and axonal and motor-sensory defects with deafness and cognitive disability. Alternative splicing results in multiple transcript variants. A related pseudogene has been identified on chromosome 10. [provided by RefSeq, Aug 2015]



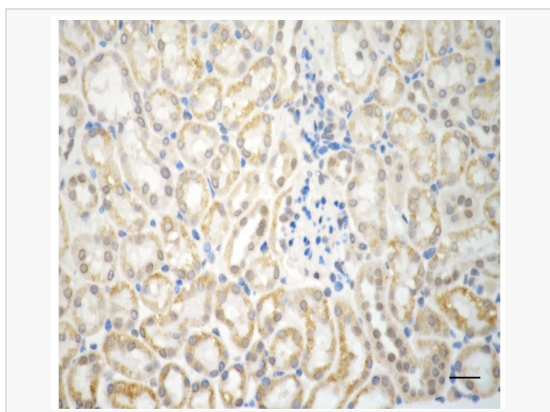
Flow cytometric analysis of AIFM1 expression in HepG2 cells using AIFM1 antibody (R021517, 1:2,000). Green, isotype control; red, AIFM1.



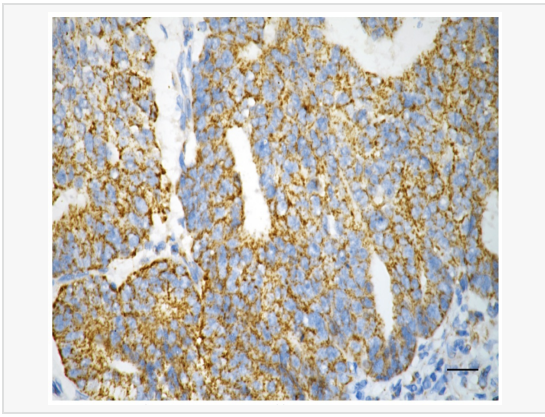
Immunocytochemical staining of HepG2 cells with AIFM1 antibody (R021517, 1:1,000). Nuclei were stained blue with DAPI; AIFM1 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: High. Scale bar, 20 µm.



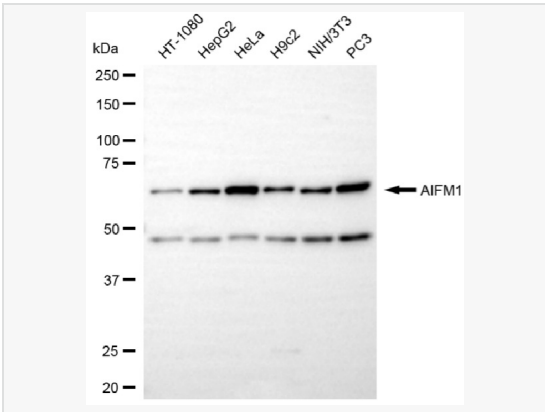
Immunohistochemistry was performed on paraffin-embedded mouse spleen using AIFM1 antibody (R021517, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 µm.



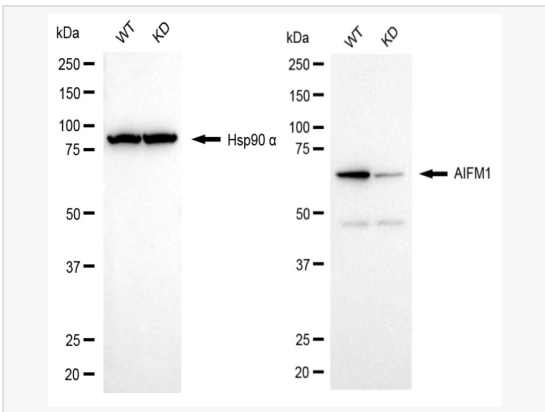
Immunohistochemistry was performed on paraffin-embedded mouse kidney using AIFM1 antibody (R021517, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 µm.



Immunohistochemistry was performed on paraffin-embedded human endometrial carcinoma using AIFM1 antibody (R021517, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 μm.



Western blotting analysis using AIFM1 antibody (R021517). Total cell lysates (30 μg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with AIFM1 antibody (R021517, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (1:20,000) respectively. Image was developed using ECL Substrate Kit.



Western blotting analysis using AIFM1 antibody (R021517). AIFM1 expression in wild-type (WT) and AIFM1 knockdown (KD) HeLa cells with 20 μg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with AIFM1 antibody (R021517, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (1:20,000) respectively. Image was developed using ECL Substrate Kit.