Product Name: KD-Validated AIFM1 Recombinant Rabbit Monoclonal Antibody
Catalog #: KVAb01443
For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC,IHC-P
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1,000-1:5,000; FC 1:200-1:2,000; ICC 1:100-1:1,000; IHC-P 1:100-1:200
Molecular Weight	Calculated MW: 66.9kDa

Antigen Information

Gene Name	AIFM1
Alternative Names	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; NAMSD; 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
Gene ID	9131.0
SwissProt ID	O95831

Immunogen A synthesized peptide derived from human AIF

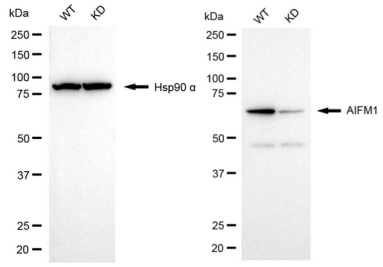
Background

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]

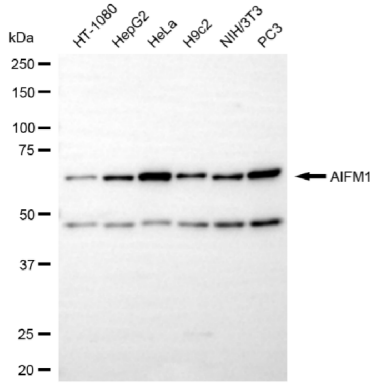
Research Area

Cell Biology,Epigenetics and Nuclear Signaling,Cancer,Metabolism,Neuroscience

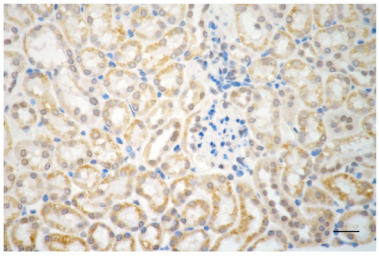
Image Data



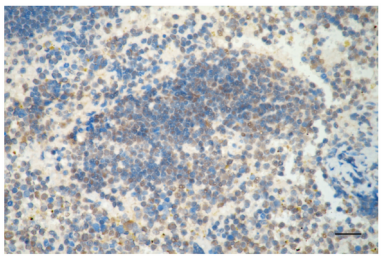
Western blotting analysis using AIFM1 antibody (KVAb01443). AIFM1 expression in wild-type (WT) and AIFM1 knockdown (KD) HeLa cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with AIFM1 antibody (KVAb01443, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



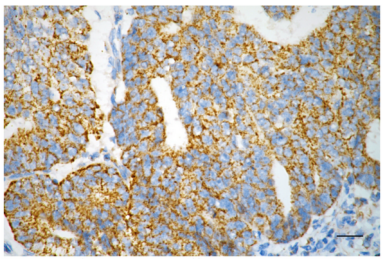
Western blotting analysis using AIFM1 antibody (KVAb01443). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with AIFM1 antibody (KVAb01443, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



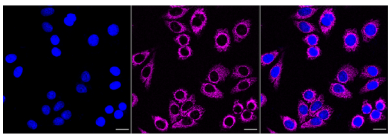
Immunohistochemistry was performed on paraffin-embedded mouse kidney using AIFM1 antibody (KVAb01443, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 µm.



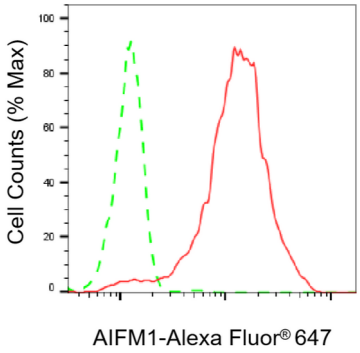
Immunohistochemistry was performed on paraffin-embedded mouse spleen using AIFM1 antibody (KVAb01443, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 μm.



Immunohistochemistry was performed on paraffin-embedded human endometrial carcinoma using AIFM1 antibody (KVAb01443, 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.



Immunocytochemical staining of HepG2 cells with AIFM1 antibody (KVAb01443, 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.



Flow cytometric analysis of AIFM1 expression in HepG2 cells using AIFM1 antibody (KVAb01443, 1:2,000). Green, isotype control; red, AIFM1.