

Basic Information

Product Name	Anti-AIF/AIFM1 Antibody (Clone#2I5)	
Gene Name	AIFM1	
Source	Mouse	
Clonality	Monoclonal	
Isotype	IgG1	
Species Reactivity	human, mouse, rat	
Tested Application	WB, IHC, IF, FCM, ICC/IF	
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.	
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human AIF, identical to the related mouse and rat sequences.	
Concentration	500 ug/ml	
Purification	protein G purified.	
Observed MW	67 kDa	
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry (IHC): 1:50-400 Immunofluorescence (IF): 1:50-400 Immunocytochemistry/Immunofluorescence (ICC/IF): 1:50-400 Flow Cytometry (Fixed): 1:50-200 (Boiling the paraffin sections in 10mM citrate buffer, pH6.0, or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

Storage

12 months from date of receipt, -20°C as supplied. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

Background Information

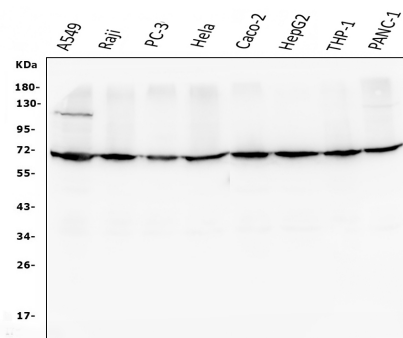
Apoptosis-inducing factor 1, mitochondrial, also known as AIF or PDCD8 is a protein that in humans is encoded by the AIFM1 gene. AIFM1 gene is mapped to Xq26.1 based on an alignment of the AIFM1 sequence with the genomic sequence. This gene encodes a flavoprotein essential for nuclear disassembly in 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, which results in a severe mitochondrial encephalomyopathy. A related pseudogene has been

identified on chromosome 10.

Reference

Anti-AIF/AIFM1 Antibody (Clone#2I5)被引用在2文献中。

Selected Validation Data



Western blot analysis of AIF/AIFM1 using anti-AIF/AIFM1 antibody (M01571-1). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: A549 whole cell lysates,

Lane 2: Raji whole cell lysates,

Lane 3: PC-3 whole cell lysates,

Lane 4: HeLa whole cell lysates,

Lane 5: Caco-2 whole cell lysates,

Lane 6: HepG2 whole cell lysates,

Lane 7: THP-1 whole cell lysates,

Lane 8: PANC-1 whole cell lysates.

After electrophoresis, proteins were transferred to a membrane.

Then the membrane was incubated with mouse anti-AIF/AIFM1

antigen affinity purified monoclonal antibody (M01571-1) at a

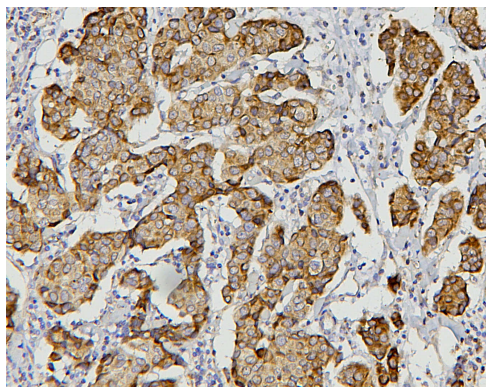
dilution of 1:1000 and probed with a goat anti-mouse IgG-HRP

secondary antibody (Catalog # BA1050). The signal is developed

using ECL Plus Western Blotting Substrate (Catalog # AR1197). A

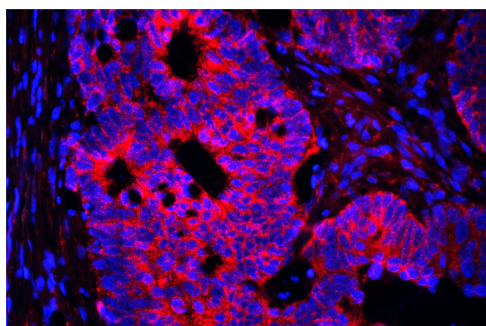
specific band was detected for AIF/AIFM1 at approximately 67 kDa.

The expected band size for AIF/AIFM1 is at 67 kDa.

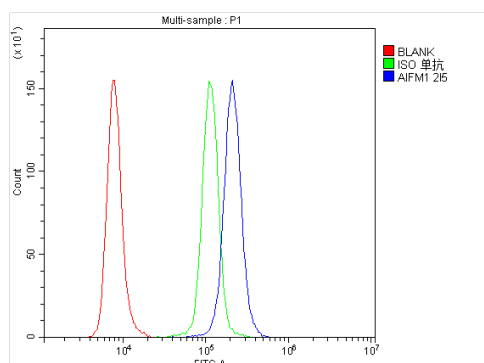


IHC analysis of AIF/AIFM1 using anti-AIF/AIFM1 antibody (M01571-1).

AIF/AIFM1 was detected in a paraffin-embedded section of human mammary cancer tissue. Biotinylated goat anti-mouse IgG was used as secondary antibody. The tissue section was incubated with mouse anti-AIF/AIFM1 Antibody (M01571-1) at a dilution of 1:200 and developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1021) with DAB (Catalog # AR1027) as the chromogen.

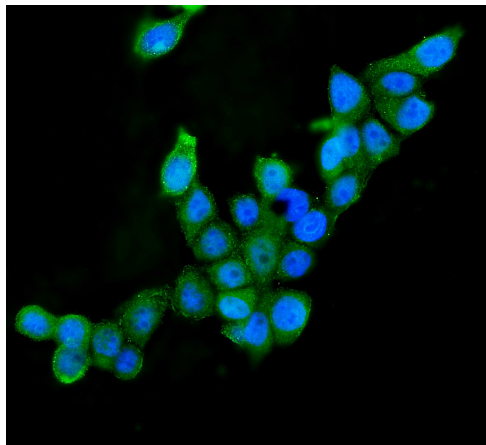


IF analysis using Anti-AIF/AIFM1 antibody (M01571-1) detected in paraffin-embedded section of human intestinal cancer tissue. The tissue section were stained using the Dylight550-conjugated Anti-mouse IgG Secondary Antibody (red)(Catalog#BA1135) and counterstained with DAPI (blue).



Flow Cytometry analysis of Raji cells using anti-AIF/AIFM1 antibody (M01571-1).

Overlay histogram showing Raji cells stained with M01571-1 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with mouse anti-AIF/AIFM1 Antibody (M01571-1) at 1:100 dilution for 30 min at 20°C. DyLight®488 conjugated goat anti-mouse IgG (BA1126) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was mouse IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.



IF analysis of AIF/AIFM1 using anti-AIF/AIFM1 antibody (M01571-1). AIF/AIFM1 was detected in an immunocytochemical section of MCF-7 cells. The section was incubated with mouse anti-AIF/AIFM1 Antibody (M01571-1) at a dilution of 1:100. Dylight488-conjugated Anti-mouse IgG Secondary Antibody (green)(Catalog#BA1126) was used as secondary antibody. The section was counterstained with DAPI (Catalog # AR1176) (Blue).