Human AIF/AIFM1 antibody

Catalog Number: ATGA0411

PRODUCT INFORMATION

Catalog number
ATGA0411

Clone No.
AT22E9

Product type
Monoclonal Antibody

UnitProt No.
O95831

NCBI Accession No.
NP_665811

Alternative Names
Apoptosis-inducing factor 1 mitochondrial isoform 2 precursor, AIF, CMTX4, COWCK, COXPD6, PDCD8

PRODUCT SPECIFICATION

Antibody Host
Mouse

Reacts With
Human

Concentration
1mg/ml (determined by BCA assay)

Formulation
Liquid in. Phosphate-Buffered Saline (pH 7.4) with 0.02% Sodium Azide, 10% glycerol

Immunogen
Recombinant human AIFM1 (98-609aa) purified from E. coli

Isotype
IgG2a kappa

Purification Note
By protein-A affinity chromatography

Application
ELISA, WB, ICC/IF

Usage
The antibody has been tested by ELISA, Western blot and ICC/IF analysis to assure specificity and reactivity. Since application varies, however, each investigation should be titrated by the reagent to obtain optimal results.

Storage

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Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description

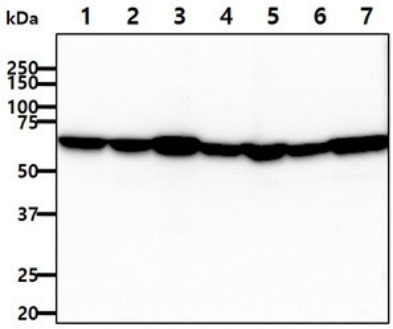
Apoptosis-inducing factor 1, also known as AIFM1, is a mitochondrial protein that translocates to the nucleus upon induction of apoptosis. AIFM1 has been shown to cause DNA fragmentation and chromatin condensation and to induce the release of cytochrome c and caspase-9 from mitochondria. Bcl-2 overexpression has been shown to prevent the release of AIFM1 from mitochondria, but not to block its apoptogenic activity. Mutations in this gene cause combined oxidative phosphorylation deficiency 6, which results in a severe mitochondrial encephalomyopathy.

General References

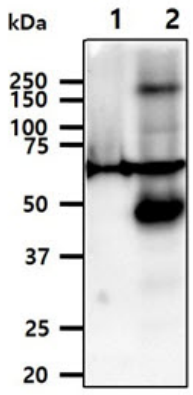
Tang Y., et al. (2013) J Proteomics. 91C: 200-209.
Kim TW., et al. (2013) Cell Death Dis. 4: e919.

DATA

Western blot analysis (WB)



The cell lysates (40ug) were resolved by SDS-PAGE, transferred to PVDF membrane and probed with anti-human AIFM1 antibody (1:1000). Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and an ECL detection system.
Lane 1. : Jurkat cell lysate
Lane 2. : HeLa cell lysate
Lane 3. : Hep3B cell lysate
Lane 4. : Raji cell lysate
Lane 5. : K562 cell lysate
Lane 6. : MCF7 cell lysate
Lane 7. : CTLL2 cell lysate



The tissue lysates (40ug) were resolved by SDS-PAGE, transferred to PVDF membrane and probed with anti-human AIFM1 antibody (1:1000). Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and an ECL detection system.
Lane 1. : Mouse heart tissue lysate
Lane 2. : Mouse liver tissue lysate

Immunocytochemistry/Immunofluorescence (ICC/IF)

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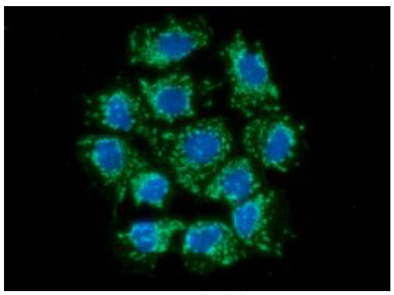

ICC/IF analysis of AIFM1 in Hep3B cells. The cell was stained with ATGA0411 (1:100). The secondary antibody (green) was used Alexa Fluor 488. DAPI was stained the cell nucleus (blue).