

PRODUCT DATA SHEET

Bioworld Technology,Inc.

AIFM1 monoclonal antibody

Catalog: MB66693 Host: Mouse Reactivity: Human

BackGround:

Apoptosis-inducing factor (AIF, PDCD8) is a ubiquitously expressed flavoprotein that plays a critical role in caspase-independent apoptosis. AIF is normally localized to the mitochondrial intermembrane space and released in response to apoptotic stimuli. Treatment of isolated nuclei with recombinant AIF leads to early apoptotic events, such as chromatin condensation and large-scale DNA fragmentation. Studies of AIF knockout mice have shown that the apoptotic activity of AIF is cell type and stimuli-dependent. Also noted was that AIF was required for embryoid body cavitation, representing the first wave of programmed cell death during embryonic morphogenesis. Structural analysis of AIF revealed two important regions, the first having oxidoreductase activity and the second being a potential DNA binding domain. While AIF is redox-active and can behave as an NADH oxidase, this activity is not required for inducing apoptosis. Instead, recent studies suggest that AIF has dual functions, a pro-apoptotic activity in the nucleus via its DNA binding and an anti-apoptotic activity via the scavenging of free radicals through its oxidoreductase activity.

Product:

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide, pH 7.3.

Molecular Weight:

~ 67 kDa

Swiss-Prot:

O95831

Purification&Purity:

The antibody was purified by immunogen affinity chromatography.

Applications:

WB (1/500 - 1/1000), IF/ICC (1/50 - 1/100)

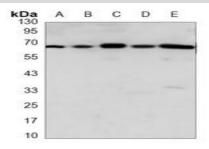
Storage&Stability:

Store at $4\,\mathrm{C}$ short term. Aliquot and store at -20 C long term. Avoid freeze-thaw cycles.

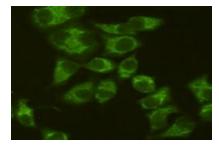
Specificity:

Recognizes endogenous levels of AIFM1 protein.

DATA:



Western blot analysis of AIFM1 expression in Hela (A), Ramos (B), HepG2 (C), MCF7 (D), Jurkat (E) whole cell lysates.



Immunofluorescent analysis of AIFM1 staining in HeLa cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 $\,^{\circ}$ C in a hidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark.

Note:

For research use only, not for use in diagnostic procedure.

Bioworld Technology, Inc.

Add: 1660 South Highway 100, Suite 500 St. Louis Park,

MN 55416,USA.

Email: <u>info@bioworlde.com</u>

Tel: 6123263284 Fax: 6122933841 Bioworld technology, co. Ltd.

Add: No 9, weidi road Qixia District Nanjing, 210046,

P. R. China.

Email: <u>info@biogot.com</u>
Tel: 0086-025-68037686
Fax: 0086-025-68035151