

DESCRIPTION

Species Reactivity	Human/Mouse/Rat
Specificity	AIF antibodies are ideal for immunocytochemistry colocalization studies in mitochondria. The unconjugated antibody detects human, mouse, and rat AIF in Western blots.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human AIF Glu121-Asp613 Accession # O95831
Conjugate	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm
Formulation	Supplied in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details. *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

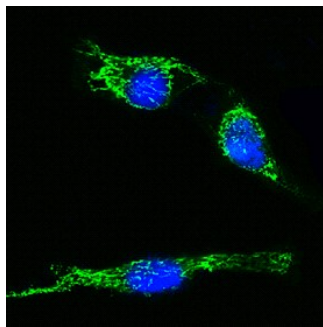
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Immunocytochemistry	1:10 dilution	See Below

DATA

Immunocytochemistry



AIF in HeLa Human Cell Line. AIF was detected in formaldehyde fixed HeLa human cervical epithelial carcinoma cell line using Sheep Anti-Human/Mouse/Rat AIF Alexa Fluor® 488-conjugated Antigen Affinity-purified Polyclonal Antibody (green; Catalog # IC5824G) at 1:10 dilution overnight at 4 ° C and counterstained with DAPI (blue). Specific staining was localized to mitochondria. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. ● 12 months from date of receipt, 2 to 8 °C as supplied.

BACKGROUND

Apoptosis-inducing factor (AIF, also known as programmed cell death protein 8) is a 58 kDa member of the FAD-dependent oxidoreductase family of molecules. It is ubiquitously expressed and found in the mitochondrial intermembrane space. AIF likely acts as a mitochondrial antioxidant providing protection via NADH oxidase activity. Upon release from the mitochondria, AIF passes into the nucleus where it initiates apoptosis. Human AIF precursor is 67 kDa in size and 613 amino acids (aa) in length and contains a cleavable N-terminal 102 aa mitochondrial localization sequence, followed by a spacer region (aa 103-129) and an oxidoreductase domain (aa 130-613) that possesses an NLS (aa 446-451). Over aa 121-613, human AIF shares 95% aa identity with mouse AIF.

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