

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 mitochondria-processed AIF.
Source	Polyclonal Rabbit 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.

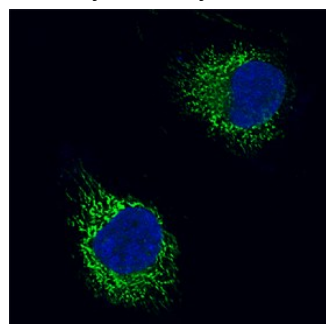
APPLICATIONS

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.

Immunocytochemistry	1 test is equal to 5µL of antibody in 45 µL of antibody diluent. Sample used was formaldehyde fixed HeLa human cervical epithelial carcinoma cell line
----------------------------	--

DATA

Immunocytochemistry



AIF in HeLa Human Cell Line.
AIF was detected in formaldehyde fixed HeLa human cervical epithelial carcinoma cell line using Rabbit Anti-Human/Mouse/Rat AIF Alexa Fluor® 488-conjugated Antigen Affinity-purified Polyclonal Antibody (green; Catalog # IC1457G) 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. <ul style="list-style-type: none"> 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.

PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc, and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.