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Datasheet for 200-401-X83

# AIF Antibody

## Overview

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| **Description:** | Anti-AIF (RABBIT) Antibody - 200-401-X83 |
| **Item No.:** | 200-401-X83 |
| **Size:** | 100 µg |
| **Applications:** | ELISA, IF, IHC, WB |
| **Reactivity:** | Human |
| **Host Species:** | Rabbit |

## Product Details

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| **Background:** | Apoptosis is characterized by several morphological nuclear changes including chromatin condensation and nuclear fragmentation. These changes are triggered by the activation of members of caspase family, caspase activated DNase, and several novel proteins. A novel gene, the product of which causes chromatin condensation and DNA fragmentation, was recently identified, cloned, and designated apoptosis inducing factor (AIF). Like the critical molecules, cytochrome c and caspase-9, in apoptosis, AIF localizes in mitochondria. AIF translocates to the nucleus when apoptosis is induced and induces mitochondria to release the apoptogenic proteins cytochrome c and caspase-9. AIF induces chromatin condensation and DNA fragmentation, which are the hallmarks of apoptosis, of the isolated nucleus and the nucleus in live cells by microinjection. AIF is highly conserved between human and mouse and widely expressed. |
| **Synonyms:** | AIF Antibody, Apoptosis-inducing factor 1, AIFM1, PDCD8 |
| **Host Species:** | Rabbit |
| **Clonality:** | Polyclonal |
| **Format:** | IgG |

## Target Details

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| **Gene Name:** | AIFM1 |
| **Reactivity:** | Human |
| **Immunogen Type:** | Conjugated Peptide |

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| **Immunogen:** | Anti-AIF antibody was prepared from whole rabbit serum produced by repeated immunizations with a peptide corresponding to amino acids near the N-terminus of mature human AIF. |
| **Purity/Specificity:** | Anti-AIF Antibody is purified by ion exchange chromatography. Cross reactivity with AIF from other sources has not been determined. |
| **Relevant Links:** | • UniProtKB - O95381<br>• GeneID - 9131<br>• NCBI - NP_001124318.2 |

## Application Details

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| **Tested Applications:** | ELISA, IF, IHC, WB |
| **Application Note:** | Anti-AIF Antibody has been tested for use in ELISA, Western Blotting, Immunocytochemistry and Immunofluorescence. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 67 kDa in Western Blots of specific cell lysates and tissues. |
| **Assay Dilutions:** | All assays should be optimized by the user. Recommended dilutions (if any) may be listed below. |
| **ELISA:** | 1:10,000 |
| **IF:** | 20 µg/mL |
| **WB:** | 1 µg/mL |

## Formulation

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| **Physical State:** | Liquid (sterile filtered) |
| **Concentration:** | 1 mg/mL by UV absorbance at 280 nm |
| **Buffer:** | 0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2 |
| **Preservative:** | 0.02% (w/v) Sodium Azide |
| **Stabilizer:** | None |

## Shipping & Handling

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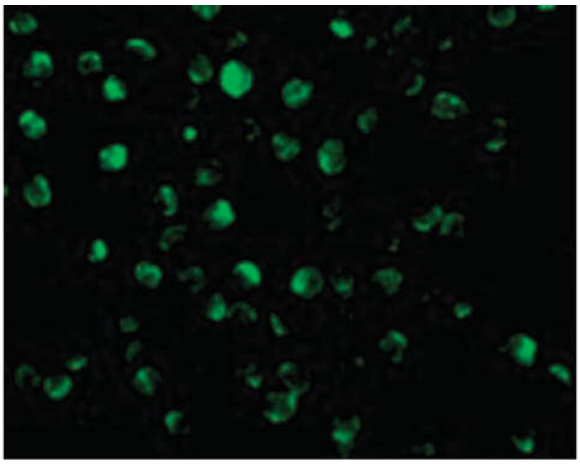
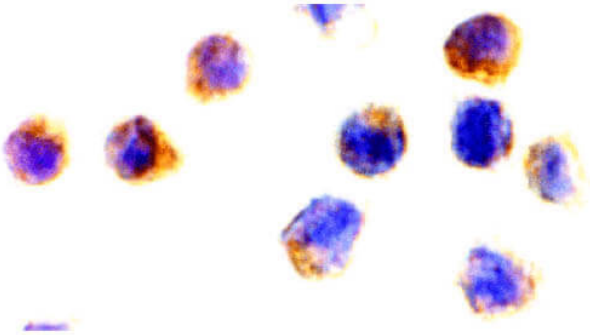
| **Shipping Condition:** | Dry Ice |
| **Storage Condition:** | Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use. |

**Expiration:** Expiration date is one (1) year from date of receipt.

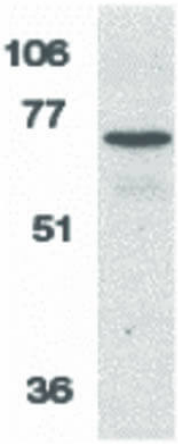
## Images



**Immunofluorescence Microscopy**
Immunofluorescence Microscopy of AIF antibody. Tissue: K562 cells. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: AIF antibody at 20 µg/mL for 1 h at RT. Secondary antibody: Fluorescein rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: AIF is cytoplasmic and is also localized in the cell membrane. Staining: AIF as green fluorescent signal.



**Immunocytochemistry**
Immunocytochemistry of AIF antibody. Cells: Jurkat cells. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: AIF antibody at 2 µg/mL for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: AIF is cytoplasmic and is also localized in the cell membrane. Staining: AIF as precipitated brown signal with hematoxylin blue nuclear counterstain.




**Western Blot**

Western Blot of AIF antibody. Lane 1: K562 cell lysate. Load: 35 µg per lane. Primary antibody: AIF antibody at 1 µg/mL for overnight at 4°C. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 79.7 kDa, 68 kDa for AIF.

## Disclaimer