# **Product Datasheet**

# AIF Antibody (E20) NB110-55446

Unit Size: 0.1 ml

Store at -20C. Avoid freeze-thaw cycles.

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# NB110-55446

AIF Antibody (E20)

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Product Information	
Unit Size	0.1 ml
Concentration	This product is unpurified. The exact concentration of antibody is not quantifiable.
Storage	Store at -20C. Avoid freeze-thaw cycles.
Clonality	Monoclonal
Clone	E20
Preservative	0.01% Sodium Azide
Isotype	IgG
Purity	Tissue culture supernatant
Buffer	49% PBS, 0.05% BSA and 50% Glycerol
Target Molecular Weight	67 kDa
Product Description	
Host	Rabbit
Gene ID	9131
Gene Symbol	AIFM1
Species	Human, Mouse, Rat
Immunogen	A synthetic peptide corresponding to residues near the C-terminus of Human AIF was used as immunogen.
Notes	Produced using Abcam's RabMab® technology. RabMab® technology is covered by the following U.S. Patents, No. 5,675,063 and/or 7,429,487.
Product Application Details	
Applications	Western Blot, Flow Cytometry, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Paraffin, Immunoprecipitation
Recommended Dilutions	Western Blot 1:1000, Flow Cytometry 1:50, Immunohistochemistry 1:500, Immunocytochemistry/ Immunofluorescence 1:500, Immunoprecipitation 1:10, Immunohistochemistry-Paraffin 1:500



### **Publications**

Huang R, Chen XQ, Huang Y et al. The multikinase inhibitor sorafenib induces caspase-dependent apoptosis in PC-3 prostate cancer cells. Asian J Androl 2010-07-01 [PMID: 20473320]

Chen X, Gong J, Zeng H et al. MicroRNA145 targets BNIP3 and suppresses prostate cancer progression. Cancer Res 2010-04-01 [PMID: 20332243]

Shen H, Hu X, Liu C et al. Ethyl pyruvate protects against hypoxic-ischemic brain injury via anti-cell death and anti-inflammatory mechanisms. Neurobiol Dis 2010-03-01 [PMID: 20026271] (WB)

Saito C, Lemasters JJ, Jaeschke H et al. c-Jun N-terminal kinase modulates oxidant stress and peroxynitrite formation independent of inducible nitric oxide synthase in acetaminophen hepatotoxicity. Toxicol Appl Pharmacol 2010-07-01 [PMID: 20423716] (WB)

Lin CY, Wu HY, Wang PL et al. Mammalian Ste20-like protein kinase 3 induces a caspase-independent apoptotic pathway. Int J Biochem Cell Biol 2010-01-01 [PMID: 19782762] (WB)

Bajt ML, Farhood A, Lemasters JJ et al. Mitochondrial bax translocation accelerates DNA fragmentation and cell necrosis in a murine model of acetaminophen hepatotoxicity. J Pharmacol Exp Ther 2008-01-01 [PMID: 17906064] (WB)

Cao G, Xing J, Xiao X et al. Critical role of calpain I in mitochondrial release of apoptosis-inducing factor in ischemic neuronal injury. J Neurosci 2007-08-01 [PMID: 17728442] (WB)

Ishimura R, Martin GR, Ackerman SL et al. Loss of apoptosis-inducing factor results in cell-type-specific neurogenesis defects. J Neurosci 2008-05-01 [PMID: 18463247] (IF/IHC)

Bajt ML, Cover C, Lemasters JJ et al. Nuclear translocation of endonuclease G and apoptosis-inducing factor during acetaminophen-induced liver cell injury. Toxicol Sci 2006-11-01 [PMID: 16896059] (IF/IHC)

Yu SW, Andrabi SA, Wang H et al. Apoptosis-inducing factor mediates poly(ADP-ribose) (PAR) polymer-induced cell death. Proc Natl Acad Sci U S A 2006-11-01 [PMID: 17116881] (ICC/IF)



**Procedures** 



# Immunohistochemistry Protocol for AIF Antibody (NB110-55446)

Immunohistochemistry Protocol for Paraffin-embedded Tissues

- 1. Solutions and reagents
- 1.1. Xylene
- 1.2. Ethanol, anhydrous denatured, histological grade (100%, 95%, 70%)
- 1.3. Washing buffer:

TBST washing buffer: 1XTBS/0.1% Tween-20

To prepare stock solution of 10X TBS: add 24.2 g Trizma base and 80 g sodium chloride to 1L of dH2O. Adjust pH to 7.6.

Working solution. 1XTBST/0.1% Tween-20: add 100ml 10XTBS to 900 ml dH2O. Add 1 ml Tween-20 and mix well.

- 1.4. Distilled water (dH2O)
- 1.5. Antigen Retrieval Solution:
- 0.01M Sodium Citrate Buffer, pH 6.0

To prepare stock solutions:

Solution A. 0.1 M citric acid solution: dissolve 21.0 g of citric acid, monohydrate (C6H8O7.H2O) in 1 liter of dH2O. Solution B. 0.1M sodium citrate solution: dissolve 29.4 g trisodium citrate dihydrate (C6H5Na3O7.2H2O) in 1 liter of dH2O.

Working solution: Add 9 ml of Stock solution A and 41 ml of stock solution B to 450 ml of dH2O. Adjust pH to 6.0.

- 1.6. 3% Hydrogene Peroxide
- 1.7. Blocking buffer:

PBS (Dulbeccos Phosphate Buffered Salts, 1X, catalog #21-031-CV from Mediatech, Inc.) + 10% serum (serum origin depends on the host of the secondary antibody)

- 1.8. Hematoxylin QS (catalog #H-3404 from Vector Laboratories, Inc.)
- 1.9. Permanent Mounting medium (VectaMount, catalog# H-5000 Vector Laboratories, Inc.)

#### 2. Protocol

- 2.1. Deparaffinization/Rehydration
- 2.1.1. Heat slides in an oven at 65C for 1 hour.
- 2.1.2. De-paraffinize/hydrate using the following series of washes: two Xylene washes (5 min each), followed by two 100% ethanol rinses (5 min each), followed by 95% ethanol, 70% ethanol, 50% ethanol, 30% ethanol, followed by H2O and a TBST wash for 5 min on a shaker.
- 2.2. Antigen Retrieval
- 2.2.1. Immerse slides into staining dish containing Antigen Retrieval Solution.
- 2.2.2. Place covered staining dish into the rice cooker. Add 120 ml of dH2O.
- 2.2.3. When cook is turned to warm (about 20 to 30 min), unplug the cooker and remove the staining dish to the bench top.
- 2.2.4. Allow to cool down, without cover, for 20 min.
- 2.3. Staining
- 2.3.1. Wash slides with TBST for 5 min on a shaker.
- 2.3.2. Inactivate endogenous peroxidase by covering tissue with 3% hydrogen peroxide for 10 min.
- 2.3.3. Wash slides three times with TBST (3 min each on a shaker).
- 2.3.4. Block slides with the blocking solution for 1 hour.
- 2.3.5. Dilute primary antibody in the blocking buffer per recommendation on the data sheet.
- 2.3.6. Apply primary antibody to each section and incubate overnight in the humidified chamber (4C).
- 2.3.7. Wash slides three times with TBST (3 min each on a shaker).
- 2.3.8. Apply to each section secondary HRP-conjugated anti-rabbit antibody diluted in the blocking solution per manufacturers recommendation; incubate for 1 hour at room temperature.
- 2.3.9. Wash slides three times with TBST (3 min each on a shaker).
- 2.3.10. Add freshly prepared DAB substrate to the sections.
- 2.3.11. Incubate tissue sections with the substrate at room temperature until suitable staining develops (generally 2 to 5 min).
- 2.3.12. Rinse sections with water.
- 2.3.13. Counterstain with Hematoxylin.
- 2.3.14. Rinse sections with water.
- 2.3.15. Dehydrate samples using two rinses with 100% Ethanol (20 dips per rinse) followed by two rinses with Xylene (30 dips per rinse).
- 2.3.16. Mount coverslips on slides using Permount medium.





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#### Limitations

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

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