

# Anti-Apoptosis Inducing Factor (AIF) Purified

Catalog Number: 14-6050

RUO: For Research Use Only. Not for use in diagnostic procedures.

## Product Information

**Contents:** Anti-Apoptosis Inducing Factor (AIF) Purified

REFCatalog Number: 14-6050Clone: PolyclonalConcentration: 0.5 mg/mLHost/Isotype: Rabbit IgG

**Formulation:** aqueous buffer, 0.09% sodium azide, may contain carrier protein/stabilizer **Temperature Limitation:** Store at 2-8°C.

**Batch Code:** Refer to vial

Use Bv: Refer to vial

Description

This rabbit polyclonal antibody reacts with human, mouse, and rat Apoptosis Inducing Factor (AIF). This 67-kDa flavoprotein is ubiquitously expressed and undergoes tissue-specific alternative splicing, resulting in the existence of five different isoforms. Moreover, AIF expression has been reported to be deregulated in cancer cells. AIF mediates caspase-independent programmed cell death in response to numerous stimuli, including hypoxia-ischemia, growth factor deprivation, excitotoxins, and glutamate receptor activation. Upon activation of apoptosis, AIF is released from the mitochondria and translocates into the nucleus to induce chromatin condensation and DNA fragmentation. Nuclear translocation of AIF can be inhibited by interaction with members of the heat shock protein 70 family.

### **Applications Reported**

This polyclonal antibody has been reported for use in immunoprecipitation, western blotting, and immunohistochemical staining.

### **Applications Tested**

This polyclonal antibody has been tested by western blot of Jurkat cell lysate. This can be used at 0.5-4 ug/mL. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

#### References

Hangen E, Blomgren K, Bénit P, Kroemer G, Modjtahedi N. Life with or without AIF. Trends Biochem Sci. 2010 May;35(5):278-87.

Gurbuxani S, Schmitt E, Cande C, Parcellier A, Hammann A, Daugas E, Kouranti I, Spahr C, Pance A, Kroemer G, Garrido C. Heat shock protein 70 binding inhibits the nuclear import of apoptosis-inducing factor. Oncogene. 2003 Oct 2;22(43):6669-78.

Susin SA, Daugas E, Ravagnan L, Samejima K, Zamzami N, Loeffler M, Costantini P, Ferri KF, Irinopoulou T, Prévost MC, Brothers G, Mak TW, Penninger J, Earnshaw WC, Kroemer G. Two distinct pathways leading to nuclear apoptosis. J Exp Med. 2000 Aug 21;192(4):571-80.

Daugas E, Susin SA, Zamzami N, Ferri KF, Irinopoulou T, Larochette N, Prévost MC, Leber B, Andrews D, Penninger J, Kroemer G. Mitochondrio-nuclear translocation of AIF in apoptosis and necrosis. FASEB J. 2000 Apr;14(5):729-39.