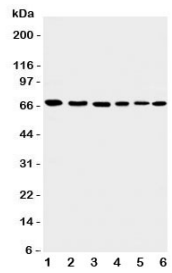
Apoptosis-Inducing Factor Antibody (Mitochondrial marker) (R31356)

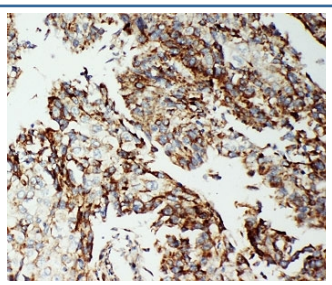
Catalog No.	Formulation	Size
R31356	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

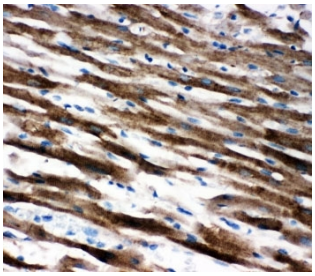
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide/thimerosal
UniProt	O95831
Applications	Western Blot : 0.5-1ug/ml Immunohistochemistry (FFPE) : 0.5-1ug/ml Immunohistochemistry (Frozen) : 0.5-1ug/ml Immunocytochemistry : 0.5-1ug/ml
Limitations	This Apoptosis-Inducing Factor antibody is available for research use only.



Western blot testing of Apoptosis-Inducing Factor antibody and Lane 1: rat heart; 2: (r) brain; 3: human K562; 4: (h) HEPG2; 5: (h) A431; 6: mouse NIH3T3 cell lysate. Expected/observed molecular weight: ~67kDa.



IHC-P: Apoptosis-Inducing Factor antibody testing of human lung cancer tissue



IHC-P: Apoptosis-Inducing Factor antibody testing of rat heart tissue

Description

Apoptosis-inducing factor 1, mitochondrial, also known as AIF or PDCD8 is a protein that in humans is encoded by the AIFM1 gene. This gene encodes a flavoprotein essential for nuclear disassembly in apoptotic cells, and it is found in the mitochondrial intermembrane space in healthy cells. Induction of apoptosis results in the translocation of this protein to the nucleus where it affects chromosome condensation and fragmentation. In addition, this gene product induces mitochondria to release the apoptogenic proteins cytochrome c and caspase-9. Mutations in this gene cause combined oxidative phosphorylation deficiency 6, which results in a severe mitochondrial encephalomyopathy. A related pseudogene has been identified on chromosome 10.

Application Notes

The stated application concentrations are suggested starting amounts. Titration of the Apoptosis-Inducing Factor antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

An amino acid sequence from the C-terminus of human AIFM1/AIF (EQHEDLNEVAKLFNIHED) was used as the immunogen for this Apoptosis-Inducing Factor antibody (100% homologous in human, mouse and rat).

Storage

After reconstitution, the Apoptosis-Inducing Factor antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.