

Recombinant Human Apoptosis-inducing factor 1, mitochondrial(AIFM1),partial

Catalog No: #AP70025

Package Size: #AP70025-1 20ug #AP70025-2 100ug #AP70025-3 1mg

Orders: order@signalwayantibody.comSupport: tech@signalwayantibody.com

Description

Product Name	Recombinant Human Apoptosis-inducing factor 1, mitochondrial(AIFM1),partial
Host Species	E.coli
Purification	Greater than 90% as determined by SDS-PAGE.
Immunogen Description	Expression Region:103-612aaSequence Info:Partial
Other Names	Programmed cell death protein 8
Accession No.	O95831
Calculated MW	71.6 kDa
Tag Info	N-terminal 6xHis-SUMO-tagged
Target Sequence	GLTPEQKQKKAALSASEGEEVPQDKAPSHVPFLLIGGGTAFAAAARSIRARDPGARVLVISEDPELPYMRPPLS KELWFSDDPNVTKTLRFKQWNGKERSIYFQPPSFYVSAQDLPHIENGGVAVLTGKKVVQLDVRDNMVKLNDG SQITYEKCLIATGGTPRSLSAIDRAGAEVKSRTTLFRKIGDFRSLEKISREVKSITIIGGGFLGSELACALGRKARA LGTEVIQLFPEKGNMGKILPEYLSNWTMEKVRREGVKVMPNAIVQSVGVSSGKLLIKLDGRKVVTDHIVA AVG LEPNVELAKTGGLEIDSDFGGFRVNAELQARSNIWVAGDAACFYDIKLGRRRVEHHDHAVVSGRLAGENMTG AAKPYWHQSMFWSDLGPDVGYEAIGLVDSSLPTVGVF AKATAQDNPKSATEQSGTGIRSESETESEASEITIP PSTPAVPQAPVQGEDYKGKVIFYLRDKVVVGIVLWNIFNRMPIARKIIKDGEQHEDLNEVAKLFNIHE
Formulation	Tris-based buffer50% glycerol
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C,-80°C. The shelf life of lyophilized form is 12 months at -20°C,-80°C.Notes:Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.

Background

Functions both as NADH oxidoreductase and as regulator of apoptosis. In response to apoptotic stimuli, it is released from the mitochondrion intermembrane space into the cytosol and to the nucleus, where it functions as a proapoptotic factor in a caspase-independent pathway. In contrast, functions as an antiapoptotic factor in normal mitochondria via its NADH oxidoreductase activity. The soluble form (AIFsol) found in the nucleus induces 'parthanatos' i.e. caspase-independent fragmentation of chromosomal DNA. Interacts with EIF3G, and thereby inhibits the EIF3 machinery and protein synthesis, and activates caspase-7 to amplify apoptosis. Plays a critical role in caspase-independent, pyknotic cell death in hydrogen peroxide-exposed cells. Binds to DNA in a sequence-independent manner.

References

Molecular characterization of mitochondrial apoptosis-inducing factor.Susin S.A., Lorenzo H.K., Zamzami N., Marzo I., Snow B.E., Brothers G.M., Mangion J., Jacotot E., Costantini P., Loeffler M., Larochette N., Goodlett D.R., Aebersold R., Siderovski D.P., Penninger J.M., Kroemer G.Nature 397:441-446(1999)Research Topic:Apoptosis

Note: This product is for in vitro research use only and is not intended for use in humans or animals.