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Datasheet for ABIN3089138

APAF1 Protein (AA 1-1248) (Strep Tag)

Overview

Quantity:	1 mg
Target:	APAF1
Protein Characteristics:	AA 1-1248
Origin:	Human
Source:	Tobacco (<i>Nicotiana tabacum</i>)
Protein Type:	Recombinant
Purification tag / Conjugate:	This APAF1 protein is labelled with Strep Tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB), ELISA

Product Details

Sequence: MDAKARNCLL QHREALEKDI KTSYIMDHMI SDGFLTISEE EKVRNEPTQQ QRAAMLKMI
LKKDNDYSYVS FYNALLHEGY KDLAALLHDG IPVVSSSSGK DSVSGITSYV RTVLCEGGVP
QRPVVFVTRK KLVNAIQKL SKLKGEPGWV TIHGMAGCGK SVLAAEAVRD HSLLEGCFPG
GVHWVSVGKQ DKSGLLMKLQ NLCTRLDQDE SFSQRLPLNI EEAKDRLRIL MLRKHPRSLI
ILDDVWDSWV LKAFDSQCQI LLTTRDKSVT DSVMGPKYVW PVESSLGKEK GLEILSLFVN
MKKADLPEQA HSIKECKGS PLVSLIGAL LRDFPNRWEY YLKQLQNKQF KRIRKSSSYD
YEALDEAMSI SVEMLREDIK DYYTDLILQ KDVKVPTKVL CILWDMETEE VEDILQEFVN
KSLIFCDRNG KSFYYLHDL QVDFLTEKNC SQLQDLHKKI ITQFQRYHQP HTLSPDQEDC
MYWYNFLAYH MASAKMHKEL CALMFSLDWI KAKTELVGPA HLIHEFVEYR HILDEKDCAV
SENFQEFLSL NGHLLGRQPF PNIVQLGLCE PETSEVYQQA KLQAKQEVND GMLYLEWINK
KNITNLSRLV VRPHTDAVYH ACFSEDGQRI ASCGADKTLQ VFKAETGEKL LEIKAHEDEV
LCCAFSTDDR FIATCSVDKK VKIWNMSMTGE LVHTYDEHSE QVNCCHFTNS SHHLLLATGS

SDCFLKLWDL NQKECRNTMF GHTNSVNHCR FSPDDKLLAS CSADGTLKLW DATSANERKS
INVKQFFLNL EDPQEDMEVI VKCCSWSADG ARIMVAAKNK IFLFDIHTSG LLGEIHTGHH
STIQYCDFSP QNHLAVVALS QYCVELWNTD SRSKVADCRG HLSWVHGVMF SPDGSSFLTS
SDDQTIRLWE TTKVCKNSAV MLKQEVDFVF QENEVMVLAV DHIRRLQLIN GRTGQIDYLT
EAQVSCCCLS PHLQYIAFGD ENGAIEILEL VNNRIFQSRF QHKKTVWHIQ FTADEKTLIS
SSDDAEIQVW NWQLDKCIFL RGHQETVKDF RLLKNSRLLS WSFDGTVKVV NIITGNKEKD
FVCHQGTVLS CDISHDATKF SSTSADKTAK IWSFDLLLPL HELRGHNGCV RCSAFSVDST
LLATGDDNGE IRIWNVSNGE LLHLCAPLSE EGAATHGGWV TDLCFSPDGK MLISAGGYIK
WWNVVTGESS QTFYTNGTNL KKIHVSPDFK TYVTVDNLGI LYILQTLE

Sequence without tag. The proposed Strep-Tag is based on experience s with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.

Characteristics:

Key Benefits:

- Made in Germany - from design to production - by highly experienced protein experts.
- Protein expressed with ALiCE® and purified by multi-step, protein-specific process to ensure correct folding and modification.
- These proteins are normally active (enzymatically functional) as our customers have reported (not tested by us and not guaranteed).
- State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a **made-to-order protein** and will be made for the first time for your order. Our experts in the lab will ensure that you receive a correctly folded protein.

The big advantage of ordering our **made-to-order proteins** in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

Expression System:

- ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from *Nicotiana tabacum* c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications.
- During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!

Product Details

Concentration:

- The concentration of our recombinant proteins is measured using the absorbance at 280nm.
- The protein's absorbance will be measured in several dilutions and is measured against its specific reference buffer.
- We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein.

Purification:

Two step purification of proteins expressed in Almost Living Cell-Free Expression System (ALICE®):

1. In a first purification step, the protein is purified from the cleared cell lysate using StrepTag capture material. Eluate fractions are analyzed by SDS-PAGE.
2. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatography. Eluate fractions are analyzed by SDS-PAGE and Western blot.

Purity:

>80 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.

Endotoxin Level:

Low Endotoxin less than 1 EU/mg (< 0.1 ng/mg)

Target Details

Target:

APAF1

Alternative Name:

APAF1 ([APAF1 Products](#))

Background:

Apoptotic protease-activating factor 1 (APAF-1),FUNCTION: Oligomeric Apaf-1 mediates the cytochrome c-dependent autocatalytic activation of pro-caspase-9 (Apaf-3), leading to the activation of caspase-3 and apoptosis. This activation requires ATP. Isoform 6 is less effective in inducing apoptosis. {ECO:0000269|PubMed:10393175, ECO:0000269|PubMed:12804598}.

Molecular Weight:

141.8 kDa

UniProt:

[O14727](#)

Pathways:

[p53 Signaling](#), [Apoptosis](#), [Caspase Cascade in Apoptosis](#), [Tube Formation](#), [Positive Regulation of Endopeptidase Activity](#)

Application Details

Application Notes:

In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

Application Details

Comment:	<p>ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from <i>Nicotiana tabacum</i> c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications.</p> <p>During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!</p>
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer. If you have a special request, please contact us.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	Unlimited (if stored properly)