

Datasheet for ABIN3092097

DAPK3 Protein (AA 1-454) (Strep Tag)



[Go to Product page](#)

Overview

Quantity:	1 mg
Target:	DAPK3
Protein Characteristics:	AA 1-454
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This DAPK3 protein is labelled with Strep Tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA

Product Details

Brand:	AliCE®
Sequence:	<p>MSTFRQEDVE DHYEMGEELG SGQFAIVRKC RQKGTGKEYA AKFIKKRRLS SSRRGVSREE IEREVNIRE IRHPNIITLH DIFENKTDVV LILELVSGGE LFDFLAEKES LTEDATQFL KQILDGVHYL HSKRIAHFDL KPENIMLLDK NVPNPRIKLI DFGIAHKIEA GNEFKNIFGT PEFVAPEIVN YEPLGLEADM WSIGVITYIL LSGASPFLGE TKQETLTNIS AVNYDFDEEY FSNTSELAKD FIRLLVKDP KRRMTIAQSL EHSWIKAIRR RNVRGEDSGR KPERRRLKTT RLKEYTIKSH SSLPPNNSYA DFERFSKYLE EAAAAEEGLR ELQSRRLCH EDVEALAAIY EEKEAWYREE SDSLGQDLRR LRQELLKTEA LKRQAQEEAK GALLGTSLGK RRFSRLNRY EALAKQVASE MRFVQDLVRA LEQEKLOGVE CGLR</p>

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.

Product Details

Characteristics:	<div>Key Benefits:</div> <ul style="list-style-type: none">• Made in Germany - from design to production - by highly experienced protein experts.• Protein expressed with ALiCE® and purified in one-step affinity chromatography• 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). <p>This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein.</p> <p>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.</p> <div>Expression System:</div> <ul style="list-style-type: none">• 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.• 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! <div>Concentration:</div> <ul style="list-style-type: none">• The concentration of our recombinant proteins is measured using the absorbance at 280nm.• The protein's absorbance will be measured against its specific reference buffer.• We use the ExPASy's ProtParam tool to determine the absorption coefficient of each protein.
Purification:	One-step Strep-tag purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®).
Purity:	> 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).
Grade:	custom-made

Target Details

Target:	DAPK3
Alternative Name:	DAPK3 (DAPK3 Products)
Background:	<p>Death-associated protein kinase 3 (DAP kinase 3) (EC 2.7.11.1) (DAP-like kinase) (Dlk) (MYPT1 kinase) (Zipper-interacting protein kinase) (ZIP-kinase),FUNCTION: Serine/threonine kinase which is involved in the regulation of apoptosis, autophagy, transcription, translation and actin cytoskeleton reorganization. Involved in the regulation of smooth muscle contraction. Regulates both type I (caspase-dependent) apoptotic and type II (caspase-independent) autophagic cell deaths signal, depending on the cellular setting. Involved in regulation of starvation-induced autophagy. Regulates myosin phosphorylation in both smooth muscle and non-muscle cells. In smooth muscle, regulates myosin either directly by phosphorylating MYL12B and MYL9 or through inhibition of smooth muscle myosin phosphatase (SMPP1M) via phosphorylation of PPP1R12A, the inhibition of SMPP1M functions to enhance muscle responsiveness to Ca(2+) and promote a contractile state. Phosphorylates MYL12B in non-muscle cells leading to reorganization of actin cytoskeleton. Isoform 2 can phosphorylate myosin, PPP1R12A and MYL12B. Overexpression leads to condensation of actin stress fibers into thick bundles. Involved in actin filament focal adhesion dynamics. The function in both reorganization of actin cytoskeleton and focal adhesion dissolution is modulated by RhoD. Positively regulates canonical Wnt/beta-catenin signaling through interaction with NLK and TCF7L2. Phosphorylates RPL13A on 'Ser-77' upon interferon-gamma activation which is causing RPL13A release from the ribosome, RPL13A association with the GAIT complex and its subsequent involvement in transcript-selective translation inhibition. Enhances transcription from AR-responsive promoters in a hormone- and kinase-dependent manner. Involved in regulation of cell cycle progression and cell proliferation. May be a tumor suppressor.</p> <p>{ECO:0000269 PubMed:10356987, ECO:0000269 PubMed:11384979, ECO:0000269 PubMed:11781833, ECO:0000269 PubMed:12917339, ECO:0000269 PubMed:15096528, ECO:0000269 PubMed:15367680, ECO:0000269 PubMed:16219639, ECO:0000269 PubMed:17126281, ECO:0000269 PubMed:17158456, ECO:0000269 PubMed:18084323, ECO:0000269 PubMed:18995835, ECO:0000269 PubMed:21169990, ECO:0000269 PubMed:21408167, ECO:0000269 PubMed:21454679, ECO:0000269 PubMed:21487036, ECO:0000269 PubMed:23454120}.</p>
Molecular Weight:	52.5 kDa
UniProt:	O43293

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.

Comment: 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!

Restrictions: For Research Use only

Handling

Format: Liquid

Buffer: The buffer composition is at the discretion of the manufacturer.
Standard Storage Buffer: PBS pH 7.4, 10 % Glycerol **Might differ depending on protein.**

Handling Advice: Avoid repeated freeze-thaw cycles.

Storage: -80 °C

Storage Comment: Store at -80°C.

Expiry Date: 12 months