

Datasheet for ABIN3091817

NCAPD3 Protein (AA 1-1498) (Strep Tag)



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Overview

Quantity:	250 µg
Target:	NCAPD3
Protein Characteristics:	AA 1-1498
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This NCAPD3 protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Brand:	AliCE®
Sequence:	<p>MVALRGLGSG LQPWCPLDLR LEWVDTVWEL DFTETEPLDP SIEAEIITG LAAFTKLYES</p> <p>LLPFATGEHG SMESIWTFFI ENNVSHSTLV ALFYHFVQIV HKKNVSVQYR EYGLHAAGLY</p> <p>FLLLEVPGSV ANQVFHPVMF DKCIQTLKKS WPQESNLNRK RKKEQPKSSQ ANPGRHRKRG</p> <p>KPPRREDIEM DEIEEQEDE NICFSARDLS QIRNAIFHLL KNFLRLLPKF SLKEKPQCQVQ</p> <p>NCIEVFVSLT NFEPVLHECH VTQARALNQA KYIPELAYYG LYLLCSPIHG EGDKVISCVF</p> <p>HQMLSVILML EVGEGSHRAP LAVTSQVINC RNQAVQFISA LVDELKESIF PVVRILLQHI</p> <p>CAKVVDKSEY RTFAAQSLVQ LLSKLPCGEY AMFIAWLYKY SRSSKIPHRV FTLDVVLALL</p> <p>ELPEREVDNT LSLEHQKFLK HKFLVQEIMF DRCLDKAPT V RSKALSSFAH CLELTVTSAS</p> <p>ESILELLINS PTFSVIESHP GTLLRNSSAF SYQRQTSNRS EPSGEINIDS SGETVGSGER</p> <p>CVMAMLRRI RDEKTNVRKS ALQVLVSILK HCDVSGMKED LWILQDQCRD PAVSVRKQAL</p> <p>QSLTELLMAQ PRCVQIQKAW LRGVVPVMD CESTVQEKAL EFLDQLLLQN IRHSHFHS</p>

DDSQVLAWAL LTLLTTESQE LSRYLNKAFH IWSKKEKFSP TFINNVISHT GTEHSAPAWM
LLSKIAGSSP RLDYSRIQS WEKISSQQNP NSNTLGHILC VIGHIAKHLP KSTRDKVTD
VKCKLNGFQW SLEVISSAVD ALQRLCRASA ETPAEEQELL TQVCGDVLST CEHRLSNIVL
KENG TG NMDE DLLVKYIFTL GDIAQLCPAR VEKRIFLLIQ SVLASSADAD HSPSSQGSSE
APASQPPPQV RGSVMPSVIR AHAIITLGKL CLQHEDLAKK SIPALVRELE VCEDVAVRNN
VIIVMCDLCI RYTIMVDKYI PNISMCLKDS DPFIRKQTLI LLTNLLQEEF VKWKGSLLFFR
FVSTLIDSHP DIASFGEFCL AHLKLNKPNV MFFQHFIECI FHFNNYEKHE KYNKFPQSER
EKRLFSKLGK SNKERRMKIY KFLLEHFTDE QRFNITSKIC LSILACFADG ILPLDLASE
LLSDTFEVLS SKEIKLLAMR SKPDKDLLME EDDMALANVV MQEAKKLIS QVQKRNFIE
IIPIIISLKT VLEKNKIPAL RELMHYLRV MQDYRDELKD FFAVDKQLAS ELEYDMKKYQ
EQLVQEQLA KHADVAGTAG GAEVAPVAQV ALCLETVPVP AGQENPAMSP AVSQPCTPRA
SAGHVAVSSP TPETGPLQRL LPKARPM SLS TAILNSVKK AVESKSRHRS RSLGVLPTL
NSGSPEKTCS QVSSYSLEQE SNGEIEHVT KRAISTPEKSI SDVTFGAGVS YIGTPRT PSS
AKEKIEGRSQ GNDILCLSLP DKPPPQPPQW NVRSRPNKD TPACSRRLR KTPLKTAN

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 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).

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.

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

Product Details

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!

Concentration:

- 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:	NCAPD3
Alternative Name:	NCAPD3 (NCAPD3 Products)
Background:	<p>Condensin-2 complex subunit D3 (Non-SMC condensin II complex subunit D3) (hCAP-D3),FUNCTION: Regulatory subunit of the condensin-2 complex, a complex which establishes mitotic chromosome architecture and is involved in physical rigidity of the chromatid axis (PubMed:14532007). May promote the resolution of double-strand DNA catenanes (intertwines) between sister chromatids. Condensin-mediated compaction likely increases tension in catenated sister chromatids, providing directionality for type II topoisomerase-mediated strand exchanges toward chromatid decatenation. Specifically required for decatenation of centromeric ultrafine DNA bridges during anaphase. Early in neurogenesis, may play an essential role to ensure accurate mitotic chromosome condensation in neuron stem cells, ultimately affecting neuron pool and cortex size (PubMed:27737959).</p> <p>{ECO:0000269 PubMed:14532007, ECO:0000269 PubMed:27737959}.</p>
Molecular Weight:	168.9 kDa
UniProt:	P42695

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