

Datasheet for ABIN3092050

## DBF4 Protein (AA 1-674) (Strep Tag)



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### Overview

Quantity:	250 µg
Target:	DBF4
Protein Characteristics:	AA 1-674
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This DBF4 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

### Product Details

Brand:	AliCE®
Sequence:	<p>MNSGAMRIHS KGHFQGGIQV KNEKNRPSLK SLKTDNRPEK SKCKPLWGKV FYLDLPSVTI</p> <p>SEKLQKDIKD LGGRVEEFLS KDISYLSNK KEAKFAQTLG RISPVPSPES AYTAETTSPH</p> <p>PSHDGSSFKS PDTVCLSRGK LLVEKAIKDH DFIPSNLSIL NALSWGVKIL HIDDIRYYIE</p> <p>QKKKELYLLK KSSTSVRDGG KRVGSGAQKT RTGRLKKPFV KVEDMSQLYR PFYLQLTNMP</p> <p>FINYSIQKPC SPFDVDKPSS MQKQTQVKLR IQTDGDYGG TSIQLQLKEK KKKGYCECCL</p> <p>QKYEDLETHL LSEQHRNFAQ SNQYQVDDI VSKLVDFVE YEKDTPKKR IKYSVGSLSLSP</p> <p>VSASVLKTE QKEKVELQHI SQKDCQEDDT TVKEQNFLYK ETQETEKLL FISEPIPHPS</p> <p>NELRGLNEKM SNKCSMLSTA EDDIRQNFTQ LPLHKNKQEC ILDISEHTLS ENDLEELRVD</p> <p>HYKCNIQASV HVSDFSTDNS GSQPKQKSDT VLFPAKDLKE KDLHSIFTHD SGLITINSSQ</p> <p>EHLTVQAKAP FHTPPEEPNE CDFKNMDSLP SGKIHKVKI ILGRNRKENL EPNAEFDKRT</p> <p>EFITQEENRI CSSPVQSLLD LFQTSEEKSE FLGFTSYTEK SGICNVLDIW EEENSDNLLT</p>

AFFSSPSTST FTGF

**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.**

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### 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 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.

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### Purification:

One-step Strep-tag purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®).

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## Product Details

Purity: > 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).

Grade: custom-made

## Target Details

Target: DBF4

Alternative Name: DBF4 ([DBF4 Products](#))

Background: Protein DBF4 homolog A (Activator of S phase kinase) (Chiffon homolog A) (DBF4-type zinc finger-containing protein 1),FUNCTION: Regulatory subunit for CDC7 which activates its kinase activity thereby playing a central role in DNA replication and cell proliferation. Required for progression of S phase. The complex CDC7-DBF4A selectively phosphorylates MCM2 subunit at 'Ser-40' and 'Ser-53' and then is involved in regulating the initiation of DNA replication during cell cycle. {ECO:0000269|PubMed:10373557, ECO:0000269|PubMed:10523313, ECO:0000269|PubMed:17062569}.

Molecular Weight: 76.9 kDa

UniProt: [Q9UBU7](#)

Pathways: [Mitotic G1-G1/S Phases, DNA Replication](#)

## 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.

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Restrictions: For Research Use only

## Handling

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Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer. Standard Storage Buffer: PBS pH 7.4, 10 % Glycerol <b>Might differ depending on protein.</b>
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months