Datasheet for ABIN3092376

EPAS1 Protein (AA 1-870) (Strep Tag)

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Overview

Quantity:	250 µg
Target:	EPAS1
Protein Characteristics:	AA 1-870
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This EPAS1 protein is labelled with Strep Tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA

Product Details

Brand:	AliCE®
Sequence:	MTADKEKKRS SSERRKEKSR DAARCRRSKE TEVFYELAHE LPLPHSVSSH LDKASIMRLA ISFLRTHKLL SSVCSENESE AEADQQMDNL YLKALEGFIA VVTQDGDMIF LSENISKFMG LTQVELTGHS IFDFTHPCDH EEIRENLSLK NGSGFGKKSK DMSTERDFFM RMKCTVTNRG RTVNLKSATW KVLHCTGQVK VYNNCPPHNS LCGYKEPLLS CLIIMCEPIQ HPSHMDIPLD SKTFLSRHSM DMKFTYCDDR ITELIGYHPE ELLGRSAYEF YHALDSENMT KSHQNLCTKG QVVSGQYRML AKHGGYVWLE TQGTVIYNPR NLQPQCIMCV NYVLSEIEKN DVVFSMDQTE SLFKPHLMAM NSIFDSSGKG AVSEKSNFLF TKLKEEPEEL AQLAPTPGDA IISLDFGNQN FEESSAYGKA ILPPSQPWAT ELRSHSTQSE AGSLPAFTVP QAAAPGSTTP SATSSSSSCS TPNSPEDYYT SLDNDLKIEV IEKLFAMDTE AKDQCSTQTD FNELDLETLA PYIPMDGEDF QLSPICPEER LLAENPQSTP QHCFSAMTNI FQPLAPVAPH SPFLLDKFQQ QLESKKTEPE HRPMSSIFFD AGSKASLPPC CGQASTPLSS MGGRSNTQWP PDPPLHFGPT KWAVGDQRTE

FLGAAPLGPP VSPPHVSTFK TRSAKGFGAR GPDVLSPAMV ALSNKLKLKR QLEYEEQAFQ DLSGGDPPGG STSHLMWKRM KNLRGGSCPL MPDKPLSANV PNDKFTQNPM RGLGHPLRHL PLPQPPSAIS PGENSKSRFP PQCYATQYQD YSLSSAHKVS GMASRLLGPS FESYLLPELT RYDCEVNVPV LGSSTLLQGG DLLRALDQAT

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 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.

Product Details

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:	EPAS1
Alternative Name:	EPAS1 (EPAS1 Products)
Background:	Endothelial PAS domain-containing protein 1 (EPAS-1) (Basic-helix-loop-helix-PAS protein MOP2) (Class E basic helix-loop-helix protein 73) (bHLHe73) (HIF-1-alpha-like factor) (HLF) (Hypoxia-inducible factor 2-alpha) (HIF-2-alpha) (HIF2-alpha) (Member of PAS protein 2) (PAS domain-containing protein 2),FUNCTION: Transcription factor involved in the induction of oxygen regulated genes. Heterodimerizes with ARNT, heterodimer binds to core DNA sequence 5'-TACGTG-3' within the hypoxia response element (HRE) of target gene promoters (By similarity). Regulates the vascular endothelial growth factor (VEGF) expression and seems to be implicated in the development of blood vessels and the tubular system of lung. May also play a role in the formation of the endothelium that gives rise to the blood brain barrier. Potent activator of the Tie-2 tyrosine kinase expression. Activation requires recruitment of transcriptional coactivators such as CREBBP and probably EP300. Interaction with redox regulatory protein APEX1 seems to activate CTAD (By similarity). {ECO:0000250, ECO:0000250|UniProtKB:P97481}.
Molecular Weight:	96.5 kDa
UniProt:	Q99814
Pathways:	Signaling Events mediated by VEGFR1 and VEGFR2, Warburg Effect

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

Application Details

	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