Datasheet for ABIN3092817

GRHL3 Protein (AA 1-626) (Strep Tag)

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Overview

Quantity:	250 µg
Target:	GRHL3
Protein Characteristics:	AA 1-626
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This GRHL3 protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Brand:	AliCE®
Sequence:	MSNELDFRSV RLLKNDPVNL QKFSYTSEDE AWKTYLENPL TAATKAMMRV NGDDDSVAAL SFLYDYYMGP KEKRILSSST GGRNDQGKRY YHGMEYETDL TPLESPTHLM KFLTENVSGT PEYPDLLKKN NLMSLEGALP TPGKAAPLPA GPSKLEAGSV DSYLLPTTDM YDNGSLNSLF ESIHGVPPTQ RWQPDSTFKD DPQESMLFPD ILKTSPEPPC PEDYPSLKSD FEYTLGSPKA IHIKSGESPM AYLNKGQFYP VTLRTPAGGK GLALSSNKVK SVVMVVFDNE KVPVEQLRFW KHWHSRQPTA KQRVIDVADC KENFNTVEHI EEVAYNALSF VWNVNEEAKV FIGVNCLSTD FSSQKGVKGV PLNLQIDTYD CGLGTERLVH RAVCQIKIFC DKGAERKMRD DERKQFRRKV KCPDSSNSGV KGCLLSGFRG NETTYLRPET DLETPPVLFI PNVHFSSLQR SGGAAPSAGP SSSNRLPLKR TCSPFTEEFE PLPSKQAKEG DLQRVLLYVR RETEEVFDAL MLKTPDLKGL RNAISEKYGF PEENIYKVYK KCKRGETSLL HPRLSRHPPP DCLECSHPVT QVRNMGFGDG FWRQRDLDSN PSPTTVNSLH FTVNSE

Product Details

	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.
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).

Product Details

Grade:	custom-made

Target Details

Target:	GRHL3
Alternative Name:	GRHL3 (GRHL3 Products)
Background:	Grainyhead-like protein 3 homolog (Sister of mammalian grainyhead) (Transcription factor CP2-like 4),FUNCTION: Transcription factor playing important roles in primary neurulation and in the differentiation of stratified epithelia of both ectodermal and endodermal origin (By similarity). Binds directly to the consensus DNA sequence 5'-AACCGGTT-3' acting as an activator and repressor on distinct target genes (PubMed:21081122, PubMed:25347468). xhibits functional redundancy with GRHL2 in epidermal morphogenetic events and epidermal wound repair (By similarity). Exhibits functional redundancy with GRHL2 in epidermal morphogenetic events and epidermal wound repair but is essential to form the epidermal barrier with TGM3 as critical direct target gene among others. Despite being dispensable during normal epidermal homeostasis in the adulthood, is again required for barrier repair after immune-mediated epidermal damage, regulates distinct gene batteries in embryonic epidermal differentiation and adult epidermal barrier reformation after injury. Plays unique and cooperative roles with GRHL2 in establishing distinct zones of primary neurulation. Essential for spinal closure, functions cooperatively with GRHL2 in closure 2 (forebrain/midbrain boundary) and posterior neuropore closure (By similarity). Also required for proper development of the oral periderm (PubMed:24360809). No genetic interaction with GRHL3, no functional cooperativity due to diverse target gene selectivity (PubMed:21081122). {ECO:0000250|UniProtKB:Q5FWH3, ECO:0000269|PubMed:12549979, ECO:0000269|PubMed:21081122, ECO:0000269|PubMed:24360809, ECO:0000269|PubMed:25347468}.
Molecular Weight:	70.3 kDa
UniProt:	Q8TE85

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

Application Details

	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