Datasheet for ABIN3133969

SOX6 Protein (AA 1-827) (Strep Tag)

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Overview

Quantity:	250 µg
Target:	SOX6
Protein Characteristics:	AA 1-827
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This SOX6 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Brand:	AliCE®
Sequence:	MSSKQATSPF ACTADGEEAM TQDLTSREKE EGSDQHPASH LPLHPIMHNK PHSEELPTLV STIQQDADWD SVLSSQQRME SENNKLCSLY SFRNTSTSPH KPDEGSRERE IMNSVTFGTP ERRKGSLADV VDTLKQKKLE EMTRTEQEDS SCMEKLLSKD WKEKMERLNT SELLGEIKGT PESLAEKERQ LSTMITQLIS LREQLLAAHD EQKKLAASQI EKQRQQMDLA RQQQEQIARQ QQQLLQQQHK INLLQQQIQV QGHMPPLMIP IFPHDQRTLA AAAAAQQGFL FPPGITYKPG DNYPVQFIPS TMAAAAASGL SPLQLQKGHV SHPQINPRLK GISDRFGRNL DPSEHGGGHS YNHRQIEQLY AAQLASMQVS PGAKMPSTPQ PPNSAGAVSP TGIKNEKRGT SPVTQVKDET TAQPLNLSSR PKTAEPVKSP TSPTQNLFPA SKTSPVNLPN KSSIPSPIGG SLGRGSSLDI LSSLNSPALF GDQDTVMKAI QEARKMREQI QREQQQQPHG VDGKLSSMNN MGLSNCRTEK ERTRFENLGP QLTGKSSEDG KLGPGVIDLT RPEDAEGSKA MNGSAAKLQQ YYCWPTGGAT VAEARVYRDA RGRASSEPHI KRPMNAFMVW AKDERRKILQ AFPDMHNSNI SKILGSRWKS

MSNQEKQPYY EEQARLSKIH LEKYPNYKYK PRPKRTCIVD GKKLRIGEYK QLMRSRRQEM RQFFTVGQQP QMPITTGTGV VYPGAITMAT TTPSPQMTSD CSSTSASPEP SLPVIQSTYG MKMDGASLAG NDMINGEDEM EAYDDYEDDP KSDYSSENEA PEPVSAN

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

Product Details

	System (AliCE®).
Purity:	> 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).
Grade:	custom-made

Target Details

Target:	SOX6
Alternative Name:	Sox6 (SOX6 Products)
Background:	Transcription factor SOX-6 (SOX-LZ),FUNCTION: Transcription factor that plays a key role in several developmental processes, including neurogenesis, chondrocytes differentiation and cartilage formation (Probable). Specifically binds the 5'-AACAAT-3' DNA motif present in enhancers and super-enhancers and promotes expression of genes important for chondrogenesis (PubMed:9755172, PubMed:11702786). Required for overt chondrogenesis when condensed prechondrocytes differentiate into early stage chondrocytes: SOX5 and SOX6 cooperatively bind with SOX9 on active enhancers and super-enhancers associated with cartilage-specific genes, and thereby potentiate SOX9's ability to transactivate (PubMed:11702786, PubMed:15529345, PubMed:26150426). Not involved in precartilaginous condensation, the first step in chondrogenesis, during which skeletal progenitors differentiate into prechondrocytes (PubMed:14993235, PubMed:26150426). Together with SOX5, required to form and maintain a pool of highly proliferating chondroblasts between epiphyses and metaphyses, to form columnar chondroblasts, delay chondrocyte prehypertrophy but promote hypertrophy, and to delay terminal differentiation of chondrocytes on contact with ossification fronts (PubMed:14993235). Binds to the proximal promoter region of the myelin protein MPZ gene, and is thereby involved in the differentiation of oligodendroglia in the developing spinal tube (PubMed:26525805). Binds to the gene promoter of MBP and acts as a transcriptional repressor (PubMed:26525805). {ECO:0000269|PubMed:11702786, ECO:0000269|PubMed:14993235, ECO:0000269|PubMed:15529345, ECO:0000269|PubMed:26150426, ECO:0000269|PubMed:26525805, ECO:0000269|PubMed:32442410, ECO:0000269|PubMed:7567444, ECO:0000269|PubMed:9755172, ECO:0000305|PubMed:32442410}.
Molecular Weight:	91.8 kDa
UniProt:	P40645

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