

Datasheet for ABIN3121211

PITX2 Protein (AA 1-317) (Strep Tag)



Overview

Quantity:	250 μg
Target:	PITX2
Protein Characteristics:	AA 1-317
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This PITX2 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details	
Brand:	AliCE®
Sequence:	METNCRKLVS ACVQLGVQPA AVECLFSKDS EIKKVEFTDS PKSRKESASS KLFPRQHPGA
	NEKDKGQQGK NEDVGAEDPS KKKRQRRQRT HFTSQQLQEL EATFQRNRYP DMSTREEIAV
	WTNLTEARVR VWFKNRRAKW RKRERNQQAE LCKNGFGPQF NGLMQPYDDM YPGYSYNNWA
	AKGLTSASLS TKSFPFFNSM NVNPLSSQSM FSPPNSISSM SMSSSMVPSA VTGVPGSSLN
	SLNNLNNLSS PSLNSAVPTP ACPYAPPTPP YVYRDTCNSS LASLRLKAKQ HSSFGYASVQ
	NPASNLSACQ YAVDRPV
	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 posttranslational 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).
Grade:	custom-made
Target Details	
Target:	PITX2

Target Details

Alternative Name:	Pitx2 (PITX2 Products)
Background:	Pituitary homeobox 2 (ALL1-responsive protein ARP1) (BRX1 homeoprotein) (Bicoid-related homeobox protein 1) (Homeobox protein PITX2) (Orthodenticle-like homeobox 2) (Paired-like homeodomain transcription factor 2) (Solurshin), FUNCTION: May play a role in myoblast differentiation. When unphosphorylated, associates with an ELAVL1-containing complex, which stabilizes cyclin mRNA and ensuring cell proliferation. Phosphorylation by AKT2 impairs this association, leading to CCND1 mRNA destabilization and progression towards differentiation. {ECO:0000269 PubMed:20019746}., FUNCTION: [Isoform Ptx2c]: Involved in the establishment of left-right asymmetry in the developing embryo. {ECO:0000269 PubMed:10585561}.
Molecular Weight:	35.3 kDa
UniProt:	P97474
Pathways:	Retinoic Acid Receptor Signaling Pathway, Regulation of Muscle Cell Differentiation, Skeletal Muscle Fiber Development
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

Handling

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