

Datasheet for ABIN3134872

RUNX2 Protein (AA 1-607) (Strep Tag)



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Overview

Quantity:	250 µg
Target:	RUNX2
Protein Characteristics:	AA 1-607
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This RUNX2 protein is labelled with Strep Tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA

Product Details

Brand:	AliCE®
Sequence:	<p>MLHSPHKQPQ NHKCGANFLQ EDCKKALAFK WLISAGHYQP PRPTESVSAL TTVHAGIFKA</p> <p>ASSIYNRGHK FYLEKKGGTM ASNSLFSAVT PCQQSFFWDP STSRRFSPPS SSLQPGKMSD</p> <p>VSPVVAAQQQ QQQQQQQQQQ QQQQQQQQQQ QQQQQQEAAA AAAAAAAAAA AAAAAVPRLR</p> <p>PPHDNRTMVE IIADHPAELV RTDSPNFLCS VLP SHWRCNK TLPVAFKVVA LGEVPDGTVV</p> <p>TVMAGNDENY SAELRNASAV MKNQVARFND LRFVGRSGRG KSFTLTITVF TNPPQVATYH</p> <p>RAIKVTVDGP REPRHRQKL DDSKPSLFSR RLSDLGRIPH PSMRVGVPPQ NPRPSLNSAP</p> <p>SPFNPQGQSQ ITDPRQAQSS PPWSYDQSYQ SYLSQMTSPS IHSTTPLSST RGTGLPAITD</p> <p>VPRRISDDDT ATSDFCWPS SLSKKSQAGA SELGPFSDPR QFPSISLSTE SRFNSNPRMHY</p> <p>PATFTYTPPV TSGMSLGMSA TTHYHTYLPP PYPGSSQSQS GPFQTSSTPY LYYGTSSASY</p> <p>QFPMVPGGDR SPSRMVPPCT TTSNGSTLLN PNLPNQNDGV DADGSHSSSP TVLNSSGRMD</p> <p>ESVWRPY</p>

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: RUNX2

Alternative Name: Runx2 ([RUNX2 Products](#))

Background: Runt-related transcription factor 2 (Acute myeloid leukemia 3 protein) (Core-binding factor subunit alpha-1) (CBF-alpha-1) (Oncogene AML-3) (Osteoblast-specific transcription factor 2) (OSF-2) (Polyomavirus enhancer-binding protein 2 alpha A subunit) (PEA2-alpha A) (PEBP2-alpha A) (SL3-3 enhancer factor 1 alpha A subunit) (SL3/AKV core-binding factor alpha A subunit),FUNCTION: Transcription factor involved in osteoblastic differentiation and skeletal morphogenesis. Essential for the maturation of osteoblasts and both intramembranous and endochondral ossification. CBF binds to the core site, 5'-PYGPYGGT-3', of a number of enhancers and promoters, including murine leukemia virus, polyomavirus enhancer, T-cell receptor enhancers, osteocalcin, osteopontin, bone sialoprotein, alpha 1(I) collagen, LCK, IL-3 and GM-CSF promoters. Inhibits KAT6B-dependent transcriptional activation (By similarity). In osteoblasts, supports transcription activation: synergizes with SPEN/MINT to enhance FGFR2-mediated activation of the osteocalcin FGF-responsive element (OCFRE). {ECO:0000250, ECO:0000269|PubMed:20484411, ECO:0000269|PubMed:9182763}.

Molecular Weight: 66.2 kDa

UniProt: [Q08775](#)

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

Application Details

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