

# Datasheet for ABIN3093949

# CBFA2T2 Protein (AA 1-604) (Strep Tag)



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Quantity:	250 μg
Target:	CBFA2T2
Protein Characteristics:	AA 1-604
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This CBFA2T2 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Brand:	AliCE®
Sequence:	MAKESGISLK EIQVLARQWK VGPEKRVPAM PGSPVEVKIQ SRSSPPTMPP LPPINPGGPR
	PVSFTPTALS NGINHSPPTL NGAPSPPQRF SNGPASSTSS ALTNQQLPAT CGARQLSKLK
	RFLTTLQQFG NDISPEIGEK VRTLVLALVN STVTIEEFHC KLQEATNFPL RPFVIPFLKA
	NLPLLQRELL HCARAAKQTP SQYLAQHEHL LLNTSIASPA DSSELLMEVH GNGKRPSPER
	REENSFDRDT IAPEPPAKRV CTISPAPRHS PALTVPLMNP GGQFHPTPPP LQHYTLEDIA
	TSHLYREPNK MLEHREVRDR HHSLGLNGGY QDELVDHRLT EREWADEWKH LDHALNCIME
	MVEKTRRSMA VLRRCQESDR EELNYWKRRY NENTELRKTG TELVSRQHSP GSADSLSNDS
	QREFNSRPGT GYVPVEFWKK TEEAVNKVKI QAMSEVQKAV AEAEQKAFEV IATERARMEQ
	TIADVKRQAA EDAFLVINEQ EESTENCWNC GRKASETCSG CNIARYCGSF CQHKDWERHH
	RLCGQNLHGQ SPHGQGRPLL PVGRGSSARS ADCSVPSPAL DKTSATTSRS STPASVTAID TNGL
	Sequence without tag. The proposed Strep-Tag is based on experience s with the expressio

# 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:	CBFA2T2
Alternative Name:	CBFA2T2 (CBFA2T2 Products)
Background:	Protein CBFA2T2 (ETO homologous on chromosome 20) (MTG8-like protein) (MTG8-related
	protein 1) (Myeloid translocation-related protein 1) (p85),FUNCTION: Transcriptional
	corepressor which facilitates transcriptional repression via its association with DNA-binding
	transcription factors and recruitment of other corepressors and histone-modifying enzymes
	(PubMed:12559562, PubMed:15203199). Via association with PRDM14 is involved in regulation
	of embryonic stem cell (ESC) pluripotency (PubMed:27281218). Involved in primordial germ cell
	(PCG) formation. Stabilizes PRDM14 and OCT4 on chromatin in a homooligomerization-
	dependent manner (By similarity). Can repress the expression of MMP7 in a ZBTB33-dependen
	manner (PubMed:23251453). May function as a complex with the chimeric protein
	RUNX1/AML1-CBFA2T1/MTG8 (AML1-MTG8/ETO fusion protein) which is produced in acute
	myeloid leukemia with the chromosomal translocation t(8,21). May thus be involved in the
	repression of AML1-dependent transcription and the induction of G-CSF/CSF3-dependent cell
	growth. May be a tumor suppressor gene candidate involved in myeloid tumors with the
	deletion of the 20q11 region. Through heteromerization with CBFA2T3/MTG16 may be involved
	in regulation of the proliferation and the differentiation of erythroid progenitors by repressing
	the expression of TAL1 target genes (By similarity). Required for the maintenance of the
	secretory cell lineage in the small intestine. Can inhibit Notch signaling probably by association
	with RBPJ and may be involved in GFI1-mediated Paneth cell differentiation (By similarity).
	{ECO:0000250 UniProtKB:070374, ECO:0000269 PubMed:23251453,
	ECO:0000303 PubMed:12559562, ECO:0000303 PubMed:15203199}.
Molecular Weight:	67.1 kDa
UniProt:	043439
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.

# **Application Details**

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 <b>Might differ depending on protein.</b>
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months