

Datasheet for ABIN3094178
C14orf169 + N066 Protein (AA 1-641) (Strep Tag)



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Overview

Quantity:	1 mg
Target:	C14orf169 + N066 (C14orf169)
Protein Characteristics:	AA 1-641
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This C14orf169 + N066 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Sequence:	MDGLQASAGP LRRGRPKRRR KPQPHSGSVL ALPLRSRKIR KQLRSVSRM AALRTQTLPS ENSEESRVES TADDLGDALP GGAAVAAPD AARREPYGHL GPAELLEASP AARSLQTPSA RLVPASAPPA RLVEVPAAPV RRVETSALLC TAQHAAVQS SGAPATASGP QVDNTGGEP WDSPLRRVLA ELNRIPSSRR RAARLFEWLI APMPPDHFYR RLWEREAVLV RRQDHTYYQG LFSTADLDSM LRNEEVQFGQ HLDAARYING RRET LNPPGR ALPAAAWSLY QAGCSLRLLC PQAFSTTVWQ FLAVLQEQFG SMAGSNVYLT PPNSQGFAPH YDDIEAFVLQ LEGRKLWRVY RPRVPTEELA LTSSPNFSQD DLGEPVLQTV LEPGDLLYFP RGFHQAEQ DGVHSLHLTL STYQRNTWGD FLEAILPLAV QAAMEENVEF RRGLPRDFMD YMGAQHSDSK DPRRTAFMEK VRVLVARLGH FAPVDAVADQ RAKDFIHDSL PPVLTDRERA LSVYGLPIRW EAGEPVNVGA QLTTETEVM LQDGIARLVG EGGHLFLYYT VENSRYVHLE EPKCLEIYPQ QADAMELLLG SYPEFVRVGD LPCDSVEDQL SLATTLYDKG LLLTKMPLAL N
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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 by multi-step, protein-specific process to ensure correct folding and modification.
- 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 will ensure that you receive a correctly folded 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 in several dilutions and is measured against its specific reference buffer.
- We use the ExPASy's ProtParam tool to determine the absorption coefficient of each protein.

Purification:

Two step purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®):

1. In a first purification step, the protein is purified from the cleared cell lysate using StrepTag

Product Details

	capture material. Eluate fractions are analyzed by SDS-PAGE.
	2. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatography. Eluate fractions are analyzed by SDS-PAGE and Western blot.
Purity:	>80 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.
Endotoxin Level:	Low Endotoxin less than 1 EU/mg (< 0.1 ng/mg)
Grade:	Crystallography grade

Target Details

Target:	C14orf169 + NO66 (C14orf169)
Alternative Name:	RIOX1 (C14orf169 Products)
Background:	Ribosomal oxygenase 1 (60S ribosomal protein L8 histidine hydroxylase) (Bifunctional lysine-specific demethylase and histidyl-hydroxylase NO66) (EC 1.14.11.27, EC 1.14.11.79) (Myc-associated protein with JmjC domain) (Nucleolar protein 66) (hsNO66) (Ribosomal oxygenase NO66) (ROX),FUNCTION: Oxygenase that can act as both a histone lysine demethylase and a ribosomal histidine hydroxylase (PubMed:23103944). Specifically demethylates 'Lys-4' (H3K4me) and 'Lys-36' (H3K36me) of histone H3, thereby playing a central role in histone code (By similarity). Preferentially demethylates trimethylated H3 'Lys-4' (H3K4me3) and monomethylated H3 'Lys-4' (H3K4me1) residues, while it has weaker activity for dimethylated H3 'Lys-36' (H3K36me2) (By similarity). Acts as a regulator of osteoblast differentiation via its interaction with SP7/OSX by demethylating H3K4me and H3K36me, thereby inhibiting SP7/OSX-mediated promoter activation (By similarity). Also catalyzes demethylation of non-histone proteins, such as CGAS: demethylation of monomethylated CGAS promotes interaction between CGAS and PARP1, followed by PARP1 inactivation (By similarity). Also catalyzes the hydroxylation of 60S ribosomal protein L8 on 'His-216', thereby playing a role in ribosome biogenesis (PubMed:23103944). Participates in MYC-induced transcriptional activation (PubMed:17308053). {ECO:0000250 UniProtKB:Q9JJF3, ECO:0000269 PubMed:17308053, ECO:0000269 PubMed:23103944}.
Molecular Weight:	71.1 kDa
UniProt:	Q9H6W3

Application Details

Application Notes:	In addition to the applications listed above we expect the protein to work for functional studies
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Application Details

as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

Comment:

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Restrictions:

For Research Use only

Handling

Format:

Liquid

Buffer:

The buffer composition is at the discretion of the manufacturer. If you have a special request, please contact us.

Handling Advice:

Avoid repeated freeze-thaw cycles.

Storage:

-80 °C

Storage Comment:

Store at -80°C.

Expiry Date:

Unlimited (if stored properly)



Image 1. „Crystallography Grade“ protein due to multi-step, protein-specific purification process