Datasheet for ABIN3137291

C14orf169 + NO66 Protein (AA 1-603) (Strep Tag)

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Overview

Quantity:	250 µg
Target:	C14orf169 + NO66 (C14orf169)
Protein Characteristics:	AA 1-603
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This C14orf169 + NO66 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Brand:	AliCE®
Sequence:	MDELPNGNGA ALLKRGRGRR RRHPQSQPRG ASVLALPLRP RKIRRHRKSA AASRVAALRA RALRSEDSDS KVAVASVRGK RKRPAELLEA SRSAEPRPVS ARPRSASATL PSRVEGWAAL SRNLGTAAPP PPGSHADEPG RPRASPLQQV LTELNGIPSS RRRAARLFEW LLAPLPPDHF YRRLWEREAV LVRRQDRSYY EGLFSTADLD SMLRYEDVQF GQHLDAARYV DGRRETLNPP GRALPAAAWS LYRAGCSLRL LCPQAFSPTV WQFLAVLQEQ FGSMAGSNVY LTPPDSQGFA PHYDDIEAFV LQLEGRKLWR VYRPRDPSEE LALTSSPNFS QEDLGEPVLQ TVLEPGDLLY FPRGFIHQAE CQDGVHSLHL TLSTYQRNTW GDFLEAVLPL AVQAAIEENV EFRRGLPRDF MDYMGAQHSD SKDPRRTAFM EKVRVLVARL GHFAPVDAVA DQRAKDFIHD SLPPVLTDRE RALSVHGLPV RWEAGEPVNV GAQLTTETQV HMLQDGVARL VGEGGRLFLY HTVENSRVYH LEEPKCLEIH PQQADAMELL LRSYPEFVRV GDLPCDSVED QLSLATMLYD KGLLLTKTPL VPS **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).
Grade:	custom-made

Target Details

Target:	C14orf169 + NO66 (C14orf169)
Alternative Name:	Riox1 (C14orf169 Products)
Background:	Ribosomal oxygenase 1 (Bifunctional lysine-specific demethylase and histidyl-hydroxylase NO66) (EC 1.14.11.27, EC 1.14.11.79),FUNCTION: Oxygenase that can act as both a histone lysine demethylase and a ribosomal histidine hydroxylase (PubMed:19927124). Specifically demethylates 'Lys-4' (H3K4me) and 'Lys-36' (H3K36me) of histone H3, thereby playing a central role in histone code (PubMed:19927124). 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) (PubMed:19927124). 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 (PubMed:19927124). Also catalyzes demethylation of non-histone proteins, such as CGAS: demethylation of monomethylated CGAS promotes interaction between CGAS and PARP1, followed by PARP1 inactivation (PubMed:35210392). Also catalyzes the hydroxylation of 60S ribosomal protein L8 on 'His-216', thereby playing a role in ribosome biogenesis (By similarity). Participates in MYC-induced transcriptional activation (By similarity). {ECO:0000250|UniProtKB:Q9H6W3, ECO:0000269|PubMed:19927124, ECO:0000269|PubMed:35210392}.
Molecular Weight:	67.6 kDa
UniProt:	Q9JJF3

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

Application Details

	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