antibodies

## Datasheet for ABIN3095890 TCOF1 Protein (AA 1-1488) (Strep Tag)





## Overview

| Quantity:                     | 1 mg   |
|-------------------------------|--|
| Target:                       | TCOF1  |
| Protein Characteristics:      | AA 1-1488                                      |
| Origin:                       | Human  |
| Source:                       | Tobacco (Nicotiana tabacum)                    |
| Protein Type:                 | Recombinant                                    |
| Purification tag / Conjugate: | This TCOF1 protein is labelled with Strep Tag. |
| Application:                  | ELISA, Western Blotting (WB), SDS-PAGE (SDS)   |

## Product Details

| Sequence: | MAEARKRREL LPLIYHHLLR AGYVRAAREV KEQSGQKCFL AQPVTLLDIY THWQQTSELG |
|-----------|---|
|           | RKRKAEEDAA LQAKKTRVSD PISTSESSEE EEEAEAETAK ATPRLASTNS SVLGADLPSS |
|           | MKEKAKAETE KAGKTGNSMP HPATGKTVAN LLSGKSPRKS AEPSANTTLV SETEEEGSVP |
|           | AFGAAAKPGM VSAGQADSSS EDTSSSSDET DVEGKPSVKP AQVKASSVST KESPARKAAP |
|           | APGKVGDVTP QVKGGALPPA KRAKKPEEES ESSEEGSESE EEAPAGTRSQ VKASEKILQV |
|           | RAASAPAKGT PGKGATPAPP GKAGAVASQT KAGKPEEDSE SSSEESSDSE EETPAAKALL |
|           | QAKASGKTSQ VGAASAPAKE SPRKGAAPAP PGKTGPAVAK AQAGKREEDS QSSSEESDSE |
|           | EEAPAQAKPS GKAPQVRAAS APAKESPRKG AAPAPPRKTG PAAAQVQVGK QEEDSRSSSE |
|           | ESDSDREALA AMNAAQVKPL GKSPQVKPAS TMGMGPLGKG AGPVPPGKVG PATPSAQVGK |
|           | WEEDSESSSE ESSDSSDGEV PTAVAPAQEK SLGNILQAKP TSSPAKGPPQ KAGPVAVQVK |
|           | AEKPMDNSES SEESSDSADS EEAPAAMTAA QAKPALKIPQ TKACPKKTNT TASAKVAPVR |
|           | VGTQAPRKAG TATSPAGSSP AVAGGTQRPA EDSSSSEESD SEEEKTGLAV TVGQAKSVGK |

Order at www.antibodies-online.com | www.antikoerper-online.de | www.anticorps-enligne.fr | www.antibodies-online.cn International: +49 (0)241 95 163 153 | USA & Canada: +1 877 302 8632 | support@antibodies-online.com Page 1/5 | Product datasheet for ABIN3095890 | 04/16/2024 | Copyright antibodies-online. All rights reserved. GLQVKAASVP VKGSLGQGTA PVLPGKTGPT VTQVKAEKQE DSESSEEESD SEEAAASPAQ VKTSVKKTQA KANPAAARAP SAKGTISAPG KVVTAAAQAK QRSPSKVKPP VRNPQNSTVL ARGPASVPSV GKAVATAAQA QTGPEEDSGS SEEESDSEEE AETLAQVKPS GKTHQIRAAL APAKESPRKG AAPTPPGKTG PSAAQAGKQD DSGSSSEESD SDGEAPAAVT SAQVIKPPLI FVDPNRSPAG PAATPAQAQA ASTPRKARAS ESTARSSSSE SEDEDVIPAT QCLTPGIRTN VVTMPTAHPR IAPKASMAGA SSSKESSRIS DGKKQEGPAT QVSKKNPASL PLTQAALKVL AQKASEAQPP VARTQPSSGV DSAVGTLPAT SPQSTSVQAK GTNKLRKPKL PEVQQATKAP ESSDDSEDSS DSSSGSEEDG EGPQGAKSAH TLGPTPSRTE TLVEETAAES SEDDVVAPSQ SLLSGYMTPG LTPANSQASK ATPKLDSSPS VSSTLAAKDD PDGKQEAKPQ QAAGMLSPKT GGKEAASGTT PQKSRKPKKG AGNPQASTLA LQSNITQCLL GQPWPLNEAQ VQASVVKVLT ELLEQERKKV VDTTKESSRK GWESRKRKLS GDQPAARTPR SKKKKKLGAG EGGEASVSPE KTSTTSKGKA KRDKASGDVK EKKGKGSLGS QGAKDEPEEE LQKGMGTVEG GDQSNPKSKK EKKKSDKRKK DKEKKEKKKK AKKASTKDSE SPSQKKKKKK KKTAEQTV

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 posttranslational modifications.
- During lysate production, the cell wall and other cellular components that are not required for

Order at www.antibodies-online.com | www.antikoerper-online.de | www.anticorps-enligne.fr | www.antibodies-online.cn International: +49 (0)241 95 163 153 | USA & Canada: +1 877 302 8632 | support@antibodies-online.com Page 2/5 | Product datasheet for ABIN3095890 | 04/16/2024 | Copyright antibodies-online. All rights reserved.

|                   | protein production are removed, leaving only the protein production machinery and the<br>mitochondria to drive the reaction. During our lysate completion steps, the additional<br>components needed for protein production (amino acids, cofactors, etc.) are added to<br>produce something that functions like a cell, but without the constraints of a living system -<br>all that's needed is the DNA that codes for the desired protein!  |
|-------------------|--|
|                   | <ul> <li>Concentration:</li> <li>The concentration of our recombinant proteins is measured using the absorbance at 280nm.</li> <li>The protein's absorbance will be measured in several dilutions and is measured against its specific reference buffer.</li> <li>We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein.</li> </ul>   |
| Purification:     | <ul> <li>Two step purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®):</li> <li>1. In a first purification step, the protein is purified from the cleared cell lysate using StrepTag capture material. Eluate fractions are analyzed by SDS-PAGE.</li> <li>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.</li> </ul> |
| 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:           | TCOF1  |
| Alternative Name: | TCOF1 (TCOF1 Products)   |

| Background: | Treacle protein (Treacher Collins syndrome protein),FUNCTION: Nucleolar protein that acts as a |
|-------------|--|
|             | regulator of RNA polymerase I by connecting RNA polymerase I with enzymes responsible for      |
|             | ribosomal processing and modification (PubMed:12777385, PubMed:26399832). Required for         |
|             | neural crest specification: following monoubiquitination by the BCR(KBTBD8) complex,           |
|             | associates with NOLC1 and acts as a platform to connect RNA polymerase I with enzymes          |
|             | responsible for ribosomal processing and modification, leading to remodel the translational    |
|             | program of differentiating cells in favor of neural crest specification (PubMed:26399832).     |
|             | {EC0:0000269 PubMed:12777385, EC0:0000269 PubMed:26399832}.                                    |

Order at www.antibodies-online.com | www.antikoerper-online.de | www.anticorps-enligne.fr | www.antibodies-online.cn International: +49 (0)241 95 163 153 | USA & Canada: +1 877 302 8632 | support@antibodies-online.com Page 3/5 | Product datasheet for ABIN3095890 | 04/16/2024 | Copyright antibodies-online. All rights reserved.

| Target Details      |  |
|---------------------|--|
| Molecular Weight:   | 152.1 kDa  |
| UniProt:            | Q13428   |
| 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<br>Nicotiana tabacum c.v This contains all the protein expression machinery needed to produce<br>even the most difficult-to-express proteins, including those that require post-translational<br>modifications.<br>During lysate production, the cell wall and other cellular components that are not required for<br>protein production are removed, leaving only the protein production machinery and the<br>mitochondria to drive the reaction. During our lysate completion steps, the additional<br>components needed for protein production (amino acids, cofactors, etc.) are added to produce<br>something that functions like a cell, but without the constraints of a living system - all that's<br>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. If you have a special request, please contact us.   |
| Handling Advice:    | Avoid repeated freeze-thaw cycles.   |
|                     |  |

Unlimited (if stored properly)

-80 °C

Store at -80°C.

Storage:

Expiry Date:

Storage Comment:

Order at www.antibodies-online.com | www.antikoerper-online.de | www.anticorps-enligne.fr | www.antibodies-online.cn International: +49 (0)241 95 163 153 | USA & Canada: +1 877 302 8632 | support@antibodies-online.com Page 4/5 | Product datasheet for ABIN3095890 | 04/16/2024 | Copyright antibodies-online. All rights reserved.



**Image 1.** "Crystallography Grade" protein due to multi-step, protein-specific purification process

Order at www.antibodies-online.com | www.antikoerper-online.de | www.anticorps-enligne.fr | www.antibodies-online.cn International: +49 (0)241 95 163 153 | USA & Canada: +1 877 302 8632 | support@antibodies-online.com Page 5/5 | Product datasheet for ABIN3095890 | 04/16/2024 | Copyright antibodies-online. All rights reserved.