Datasheet for ABIN3136896

# TCF7L2 Protein (AA 1-459) (His tag)

1 Image

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## Overview

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| Quantity: | 1 mg |
| Target: | TCF7L2 |
| Protein Characteristics: | AA 1-459 |
| Origin: | Mouse |
| Source: | Insect Cells |
| Protein Type: | Recombinant |
| Purification tag / Conjugate: | This TCF7L2 protein is labelled with His tag. |
| Application: | ELISA, Western Blotting (WB), Crystallization (Crys), SDS-PAGE (SDS) |

## Product Details

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| Sequence: | MPQLNGGGGD DLGANDELIS FKDEGEQEEK NSENSSAERD LADVKSSLVN ESETNQDSSS DSEAERRPPP RSESFRDKSR ESLEEAAKRQ DGGLFKGPPY PGYPFIMIPD LTSPYLPNGS LSPTARTYLQ MKWPLLDVQA GSLQSRQTLK DARSPSPAHI VSNKVPVVQH PHHVHPLTPL ITYSNEHFTP GNPPPHLPAD VDPKTGIPRP PHPPDISPYY PLSPGTVGQI PHPLGWLVPQ QGQPVYPITT GGFRHPYPTA LTVNASMSRF PPHMVPPHHT LHTTGIPHPA IVTPTVKQES SQSDVGSLHS SKHQDSKKEE EKKKPHIKKP LNAFMLYMKE MRAKVVAECT LKESAAINQI LGRRWHALSR EEQAKYYELA RKERQLHMQL YPGWSARDNY GKKKKRKRDK QPGETNEHSE CFLNPCLSLP PITDLSAPKK CRARFGLDQQ NNWCGPCSL<br>**Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a special request, please contact us.** |
| Characteristics: | • Made in Germany - from design to production - by highly experienced protein experts.<br>• Mouse Tcf7l2 Protein (raised in Insect Cells) purified by multi-step, protein-specific process |

## Product Details

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| | to ensure crystallization grade.<br>• State-of-the-art algorithm used for plasmid design (Gene synthesis).<br><br>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.<br>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.<br>In the unlikely event that the protein cannot be expressed or purified we do not charge anything (other companies might charge you for any performed steps in the expression process for custom-made proteins, e.g. fees might apply for the expression plasmid, the first expression experiments or purification optimization).<br>When you order this made-to-order protein you will only pay upon receival of the correctly folded protein. With no financial risk on your end you can rest assured that our experienced protein experts will do everything to make sure that you receive the protein you ordered.<br>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.<br>The concentration of the protein is calculated using its specific absorption coefficient. We use the Expasy's protparam tool to determine the absorption coefficient of each protein. |
| Purification: | Two step purification of proteins expressed in baculovirus infected SF9 insect cells:<br>1. In a first purification step, the protein is purified from the cleared cell lysate using three different His-tag capture materials: high yield, EDTA resistant, or DTT resistant. Eluate fractions are analyzed by SDS-PAGE.<br>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: | >95 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot. |
| Sterility: | 0.22 µm filtered |
| Endotoxin Level: | Protein is endotoxin free. |
| Grade: | Crystallography grade |

## Target Details

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| Target: | TCF7L2 |
| Alternative Name: | Tcf7l2 (TCF7L2 Products) |

## Target Details

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| Background: | Participates in the Wnt signaling pathway and modulates MYC expression by binding to its promoter in a sequence-specific manner. Acts as repressor in the absence of CTNNB1, and as activator in its presence. Activates transcription from promoters with several copies of the Tcf motif CCTTTGATC in the presence of CTNNB1. TLE1, TLE2, TLE3 and TLE4 repress transactivation mediated by TCF7L2/TCF4 and CTNNB1. Expression of dominant-negative mutants results in cell-cycle arrest in G1 (By similarity). Necessary for the maintenance of the epithelial stem-cell compartment of the small intestine. {ECO:0000250, ECO:0000269\|PubMed:21856776, ECO:0000269\|PubMed:9697701}. |
| Molecular Weight: | 52.2 kDa Including tag. |
| UniProt: | Q924A0 |
| Pathways: | WNT Signaling, Positive Regulation of Peptide Hormone Secretion, Peptide Hormone Metabolism, Regulation of Hormone Metabolic Process, Carbohydrate Homeostasis, Stem Cell Maintenance, Protein targeting to Nucleus |

## Application Details

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| 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 gurantee though. |
| Comment: | Protein has not been tested for activity yet. In cases in which it is highly likely that the recombinant protein with the default tag will be insoluble our protein lab may suggest a higher molecular weight tag (e.g. GST-tag) instead to increase solubility. We will discuss all possible options with you in detail to assure that you receive your protein of interest. |
| Restrictions: | For Research Use only |

## Handling

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| Format: | Liquid |
| Buffer: | 100 mM NaCL, 20 mM Hepes, 10% glycerol. pH value is at the discretion of the manufacturer. |
| Handling Advice: | Avoid repeated freeze-thaw cycles. |
| Storage: | -80 °C |
| Storage Comment: | Store at -80°C. |
| Expiry Date: | Unlimited (if stored properly) |

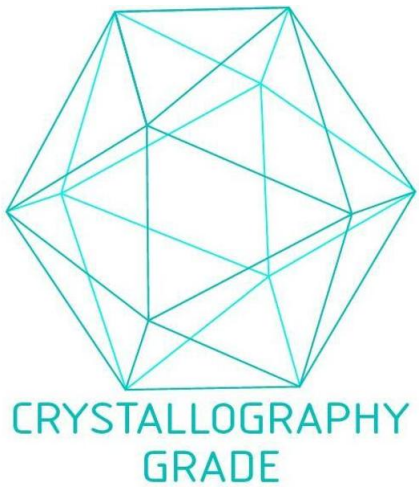


**Image 1.** „Crystallography Grade“ protein due to multi-step, protein-specific purification process