Datasheet for ABIN3094293

# Oligophrenin 1 Protein (OPHN1) (AA 1-802) (Strep Tag)

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## Overview

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| Quantity: | 250 µg |
| Target: | Oligophrenin 1 (OPHN1) |
| Protein Characteristics: | AA 1-802 |
| Origin: | Human |
| Source: | Cell-free protein synthesis (CFPS) |
| Protein Type: | Recombinant |
| Purification tag / Conjugate: | This Oligophrenin 1 protein is labelled with Strep Tag. |
| Application: | Western Blotting (WB), SDS-PAGE (SDS), ELISA |

## Product Details

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| Brand: | AliCE® |
| Sequence: | MGHPPLEFSD CYLDSPDFRE RLKCYEQELE RTNKFIKDVI KDGNALISAM RNYSSAVQKF SQTLQSFQFD FIGDTLTDDE INIAESFKEF AELLNEVENE RMMMVHNASD LLIKPLENFR KEQIGFTKER KKKFEKDGER FYSLLDRHLH LSSKKKESQL QEADLQVDKE RHNFFESSLD YVYQIQEVQE SKKFNIVEPV LAFLHSLFIS NSLTVELTQD FLPYKQQLQL SLQNTRNHFS STREEMEELK KRMKEAPQTC KLPGQPTIEG YLYTQEKWAL GISWVKYYCQ YEKETKTLTM TPMEQKPGAK QGPLDLTLKY CVRRKTESID KRFCFDIETN ERPGTITLQA LSEANRRLWM EAMDGKEPIY HSPITKQQEM ELNEVGFKFV RKCINIIETK GIKTEGLYRT VGSNIQVQKL LNAFFDPKCP GDVDFHNSDW DIKTITSSLK FYLRNLSEPV MTYRLHKELV SAAKSDNLDY RLGAIHSLVY KLPEKNREML ELLIRHLVNV CEHSKENLMT PSNMGVIFGP TLMRAQEDTV AAMMNIKFQN IVVEILIEHF GKIYLGPPEE SAAPPVPPPR VTARRHKPIT ISKRLLRERT VFYTSSLDES EDEIQHQTPN GTITSSIEPP KPPQHPKLPI QRSGETDPGR KSPSRPILDG |

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| | KLEPCPEVDV GKLVSRLQDG GTKITPKATN GPMPGSGPTK TPSFHIKRPA PRPLAHHKEG DADSFSKVRP PGEKPTIIRP PVRPPDPPCR AATPQKPEPK PDIVAGNAGE ITSSVVASRT RFFETASRKT GSSQGRLPGD ES<br>**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:<br>• Made in Germany - from design to production - by highly experienced protein experts.<br>• Protein expressed with ALiCE® and purified in one-step affinity chromatography<br>• These proteins are normally active (enzymatically functional) as our customers have reported (not tested by us and not guaranteed).<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 try to ensure that you receive soluble 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><br>Expression System:<br>• 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.<br>• 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!<br><br>Concentration:<br>• The concentration of our recombinant proteins is measured using the absorbance at 280nm.<br>• The protein's absorbance will be measured against its specific reference buffer.<br>• 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 |

## Product Details

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| | System (AliCE®). |
| Purity: | > 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC). |
| Grade: | custom-made |

## Target Details

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| Target: | Oligophrenin 1 (OPHN1) |
| Alternative Name: | OPHN1 (OPHN1 Products) |
| Background: | Oligophrenin-1,FUNCTION: Stimulates GTP hydrolysis of members of the Rho family. Its action on RHOA activity and signaling is implicated in growth and stabilization of dendritic spines, and therefore in synaptic function. Critical for the stabilization of AMPA receptors at postsynaptic sites. Critical for the regulation of synaptic vesicle endocytosis at presynaptic terminals. Required for the localization of NR1D1 to dendrites, can suppress its repressor activity and protect it from proteasomal degradation (By similarity). {ECO:0000250}. |
| Molecular Weight: | 91.6 kDa |
| UniProt: | O60890 |

## 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 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.<br>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

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| Format: | Liquid |
| Buffer: | The buffer composition is at the discretion of the manufacturer.<br>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 |