Datasheet for ABIN3129909

# SLC13A2 Protein (AA 1-586) (Strep Tag)

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## Overview

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| Quantity: | 250 µg |
| Target: | SLC13A2 |
| Protein Characteristics: | AA 1-586 |
| Origin: | Mouse |
| Source: | Cell-free protein synthesis (CFPS) |
| Protein Type: | Recombinant |
| Purification tag / Conjugate: | This SLC13A2 protein is labelled with Strep Tag. |
| Application: | ELISA, SDS-PAGE (SDS), Western Blotting (WB) |

## Product Details

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| Brand: | AliCE® |
| Sequence: | MATCWQALWA YRSYLIVLCL PIFLLPLPLI VQTKEAYCAY SIILMALLWC TEALPLAVTA LFPIILFPLM GIMEASKVCL EYFKDTNILF VGGLMVAIAV EHWNLHKRIA LGVLLIIGVR PALLLLGFML VTAFLSMWIS NTATTAMMLP IGYAVLEQLQ GSQKDVEEGN SNPSFELQEA SPQKEETKLD NGQAVSVSSE PRAQKTKEHH RFSQGLSLCI CYSASIGGIA TLTGTTPNLV LQGQVNSIFP ENSNVVNFAS WFGFAFPTMV ILLLLAWLWL QVLFLGVNFR KNFGFGEGEE ERKQAAFQVI KTQHRLLGPM SFAEKAVTFL FVLLVVLWFT REPGFFPGWG DTAFANKKGQ SMVSDGTVAI FISLIMFIIP SKIPGLTEDP KKPGKLKAPP AILTWKTVND KMPWNILILL GGGFALAKGS EESGLSKWLG DKLTPLQHVP PSATVLILSL LVAIFTECTS NVATTTLFLP ILASMAQAIC LHPLYVMLPC TLAASLAFML PVATPPNAIV FSFGGLKVSD MARAGFLLNI IGVLTITLSI NSWSIPIFKL DTFPTWAYSN TSQCLLNPPN STVPGH<br>**Sequence without tag. The proposed Strep-Tag is based on experience s with the expression** |

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| | **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 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: | SLC13A2 |
| Alternative Name: | Slc13a2 (SLC13A2 Products) |
| Background: | Solute carrier family 13 member 2 (Na(+)/dicarboxylate cotransporter 1) (NaDC-1) (Renal sodium/dicarboxylate cotransporter),FUNCTION: Low-affinity sodium-dicarboxylate cotransporter, that mediates the entry of citric acid cycle intermediates, such as succinate, citrate, fumarate and alpha-ketoglutarate (2-oxoglutarate) into the small intestine and renal proximal tubule (PubMed:10966927) (By similarity). Can transport citrate in a Na(+)-dependent manner, recognizing the divalent form of citrate rather than the trivalent form which is normally found in blood (PubMed:10966927). Transports the dicarboxylate into the cell with a probable stoichiometry of 3 Na(+) for 1 divalent dicarboxylate, rendering the process electrogenic (By similarity). Has a critical role in renal dicarboxylate transport (PubMed:17410095). {ECO:0000250\|UniProtKB:Q13183, ECO:0000269\|PubMed:10966927, ECO:0000269\|PubMed:17410095}. |
| Molecular Weight: | 64.1 kDa |
| UniProt: | Q9ES88 |

## 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 |