

Datasheet for ABIN3077186

USP39 Protein (AA 1-565) (Strep Tag)



Go to Product page

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| Quantity: | 250 μg |
|-------------------------------|--|
| Target: | USP39 |
| Protein Characteristics: | AA 1-565 |
| Origin: | Human |
| Source: | Cell-free protein synthesis (CFPS) |
| Protein Type: | Recombinant |
| Purification tag / Conjugate: | This USP39 protein is labelled with Strep Tag. |
| Application: | Western Blotting (WB), ELISA, SDS-PAGE (SDS) |

| Product Details | |
|-----------------|--|
| Brand: | AliCE® |
| Sequence: | MSGRSKRESR GSTRGKRESE SRGSSGRVKR ERDREREPEA ASSRGSPVRV KREFEPASAR |
| | EAPASVVPFV RVKREREVDE DSEPEREVRA KNGRVDSEDR RSRHCPYLDT INRSVLDFDF |
| | EKLCSISLSH INAYACLVCG KYFQGRGLKS HAYIHSVQFS HHVFLNLHTL KFYCLPDNYE |
| | IIDSSLEDIT YVLKPTFTKQ QIANLDKQAK LSRAYDGTTY LPGIVGLNNI KANDYANAVL |
| | QALSNVPPLR NYFLEEDNYK NIKRPPGDIM FLLVQRFGEL MRKLWNPRNF KAHVSPHEML |
| | QAVVLCSKKT FQITKQGDGV DFLSWFLNAL HSALGGTKKK KKTIVTDVFQ GSMRIFTKKL |
| | PHPDLPAEEK EQLLHNDEYQ ETMVESTFMY LTLDLPTAPL YKDEKEQLII PQVPLFNILA |
| | KFNGITEKEY KTYKENFLKR FQLTKLPPYL IFCIKRFTKN NFFVEKNPTI VNFPITNVDL |
| | REYLSEEVQA VHKNTTYDLI ANIVHDGKPS EGSYRIHVLH HGTGKWYELQ DLQVTDILPQ |
| | MITLSEAYIQ IWKRRDNDET NQQGA |
| | Sequence without tag. The proposed Strep-Tag is based on experience s with the express |

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 posttranslational 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: | USP39 | |
|---------------------|---|--|
| Alternative Name: | USP39 (USP39 Products) | |
| Background: | Ubiquitin carboxyl-terminal hydrolase 39 (EC 3.4.19.12) (SAD1 homolog) (U4/U6.U5 tri-snRNP- | |
| | associated 65 kDa protein),FUNCTION: Deubiquitinating enzyme that plays a role in many | |
| | cellular processes including cellular antiviral response, epithelial morphogenesis, DNA repair o | |
| | B-cell development (PubMed:33127822, PubMed:34614178). Plays a role in pre-mRNA splicing | |
| | as a component of the U4/U6-U5 tri-snRNP, one of the building blocks of the precatalytic | |
| | spliceosome (PubMed:11350945, PubMed:26912367). Specifically regulates immunoglobulin | |
| | gene rearrangement in a spliceosome-dependent manner, which involves modulating | |
| | chromatin interactions at the Igh locus and therefore plays an essential role in B-cell | |
| | development (By similarity). Regulates AURKB mRNA levels, and thereby plays a role in | |
| | cytokinesis and in the spindle checkpoint (PubMed:18728397). Regulates apoptosis and G2/M | |
| | cell cycle checkpoint in response to DNA damage by deubiquitinating and stabilizing CHK2 | |
| | (PubMed:30771428). Plays also an important role in DNA repair by controlling the recruitment | |
| | of XRCC4/LIG4 to DNA double-strand breaks for non-homologous end-joining repair | |
| | (PubMed:34614178). Participates in antiviral activity by affecting the type I IFN signaling by | |
| | stabilizing STAT1 and decreasing its 'Lys-6'-linked ubiquitination (PubMed:33127822). | |
| | Contributes to non-canonical Wnt signaling during epidermal differentiation (By similarity). Act | |
| | as a negative regulator NF-kappa-B activation through deubiquitination of 'Lys-48'-linked | |
| | ubiquitination of NFKBIA (PubMed:36651806). {ECO:0000250 UniProtKB:Q3TIX9, | |
| | ECO:0000269 PubMed:11350945, ECO:0000269 PubMed:18728397, | |
| | ECO:0000269 PubMed:26912367, ECO:0000269 PubMed:30771428, | |
| | ECO:0000269 PubMed:33127822, ECO:0000269 PubMed:34614178, | |
| | ECO:0000269 PubMed:36651806}. | |
| Molecular Weight: | 65.4 kDa | |
| UniProt: | Q53GS9 | |
| Pathways: | Ribonucleoprotein Complex Subunit Organization | |
| 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 | |

Application Details

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!

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 |