

Datasheet for ABIN3113277

DPP4 Protein (AA 1-766) (Strep Tag)



[Go to Product page](#)

Overview

| | |
|-------------------------------|---|
| Quantity: | 250 µg |
| Target: | DPP4 |
| Protein Characteristics: | AA 1-766 |
| Origin: | Human |
| Source: | Cell-free protein synthesis (CFPS) |
| Protein Type: | Recombinant |
| Purification tag / Conjugate: | This DPP4 protein is labelled with Strep Tag. |
| Application: | Western Blotting (WB), SDS-PAGE (SDS), ELISA |

Product Details

| | |
|-----------|---|
| Brand: | AliCE® |
| Sequence: | <p>MKTPWKVLLG LLGAAALVTI ITVPVLLNK GTDDATADSR KTYTLTDYLYK NTYRLKLYSL</p> <p>RWISDHEYLY KQENNILVFN AEYGNSSVFL ENSTFDEFGH SINDYSISPD GQFILLEYN</p> <p>VKQWRHSYTA SYDIYDLNKR QLITEERIPN NTQWVTWSPV GHKLAYVWNN DIYVKIEPNL</p> <p>PSYRITWTGK EDIYNGITD WYEEEFVSA YSALWWSPNG TFLAYAQFND TEVPLIEYSF</p> <p>YSDSLQYPK TVRVPYPKAG AVNPTVKFFV VNTDSLSSVT NATSIQITAP ASMLIGDHYL</p> <p>CDVTWATQER ISLQWLRRIQ NYSVMDICDY DESSGRWNCL VARQHIEMST TGWVGRFRPS</p> <p>EPHFTLDGNS FYKISNEEG YRHICYFQID KKDCTFITKG TWEVIGIEAL TSDYLYISN</p> <p>EYKGMPGGRN LYKIQLSDYT KVTCLSCELN PERCQYYSVS FSKEAKYYQL RCSGPGPLPLY</p> <p>TLHSSVNDKG LRVLEDNSAL DKMLQNVQMP SKKLDFIILN ETKFWYQMIL PPHFDKSKKY</p> <p>PLLLDVYAGP CSQKADTVFR LNWATYLAST ENIIVASFDG RSGYQGDKI MHAINRRLGT</p> <p>FEVEDQIEAA RQFSKMGFVD NKRIAIWGS YGGYVTSMVL GSGSGVFKCG IAVAPVSRWE</p> |

YYDSVYTERY MGLPTPEDNL DHYRNSTVMS RAENFKQVEY LLIHGTTADDN VHFQQSAQIS
KALVDVGVDVDF QAMWYTDEDH GIASSTAHHQH IYTHMSHFIK QCFSLP

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 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 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!

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®).

Product Details

Purity: > 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).

Grade: custom-made

Target Details

Target: DPP4

Alternative Name: DPP4 ([DPP4 Products](#))

Background: Dipeptidyl peptidase 4 (EC 3.4.14.5) (ADABP) (Adenosine deaminase complexing protein 2) (ADCP-2) (Dipeptidyl peptidase IV) (DPP IV) (T-cell activation antigen CD26) (TP103) (CD antigen CD26) [Cleaved into: Dipeptidyl peptidase 4 membrane form (Dipeptidyl peptidase IV membrane form), Dipeptidyl peptidase 4 soluble form (Dipeptidyl peptidase IV soluble form)], FUNCTION: Cell surface glycoprotein receptor involved in the costimulatory signal essential for T-cell receptor (TCR)-mediated T-cell activation (PubMed:10951221, PubMed:10900005, PubMed:11772392, PubMed:17287217). Acts as a positive regulator of T-cell coactivation, by binding at least ADA, CAV1, IGF2R, and PTPRC (PubMed:10951221, PubMed:10900005, PubMed:11772392, PubMed:14691230). Its binding to CAV1 and CARD11 induces T-cell proliferation and NF-kappa-B activation in a T-cell receptor/CD3-dependent manner (PubMed:17287217). Its interaction with ADA also regulates lymphocyte-epithelial cell adhesion (PubMed:11772392). In association with FAP is involved in the pericellular proteolysis of the extracellular matrix (ECM), the migration and invasion of endothelial cells into the ECM (PubMed:16651416, PubMed:10593948). May be involved in the promotion of lymphatic endothelial cells adhesion, migration and tube formation (PubMed:18708048). When overexpressed, enhanced cell proliferation, a process inhibited by GPC3 (PubMed:17549790). Acts also as a serine exopeptidase with a dipeptidyl peptidase activity that regulates various physiological processes by cleaving peptides in the circulation, including many chemokines, mitogenic growth factors, neuropeptides and peptide hormones such as brain natriuretic peptide 32 (PubMed:16254193, PubMed:10570924). Removes N-terminal dipeptides sequentially from polypeptides having unsubstituted N-termini provided that the penultimate residue is proline (PubMed:10593948). {ECO:0000269|PubMed:10570924, ECO:0000269|PubMed:10593948, ECO:0000269|PubMed:10900005, ECO:0000269|PubMed:10951221, ECO:0000269|PubMed:11772392, ECO:0000269|PubMed:14691230, ECO:0000269|PubMed:16254193, ECO:0000269|PubMed:16651416, ECO:0000269|PubMed:17287217, ECO:0000269|PubMed:17549790, ECO:0000269|PubMed:18708048}., FUNCTION: (Microbial infection) Acts as a receptor for human coronavirus MERS-CoV-2.

Target Details

| | |
|-------------------|--|
| | {ECO:0000269 PubMed:23835475}. |
| Molecular Weight: | 88.3 kDa |
| UniProt: | P27487 |
| Pathways: | Peptide Hormone Metabolism , Regulation of Leukocyte Mediated Immunity |

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: | <p>ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from <i>Nicotiana tabacum</i> 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.</p> <p>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!</p> |
| Restrictions: | For Research Use only |

Handling

| | |
|------------------|---|
| Format: | Liquid |
| Buffer: | <p>The buffer composition is at the discretion of the manufacturer.</p> <p>Standard Storage Buffer: PBS pH 7.4, 10 % Glycerol Might differ depending on protein.</p> |
| Handling Advice: | Avoid repeated freeze-thaw cycles. |
| Storage: | -80 °C |
| Storage Comment: | Store at -80°C. |
| Expiry Date: | 12 months |