

Datasheet for ABIN3133607

DPP4 Protein (AA 1-760) (Strep Tag)



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Overview

Quantity:	250 µg
Target:	DPP4
Protein Characteristics:	AA 1-760
Origin:	Mouse
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 LLGVAALVTI ITVPIVLLSK DEAAADSRRT YSLADYLKST FRVKSYSLWW</p> <p>VSDFEYLYKQ ENNILLNNAE HGNSSIFLEN STFESFGYHS VSPDRLFVLL EYNYVKQWRH</p> <p>SYTASYNIYD VNKRQLITEE KIPNNTQWIT WSPEGHKLAY VWKNDIYVKV EPHLPShRIT</p> <p>STGEENViYN GITDWVYEEE VFGAYSALWW SPNNTFLAYA QFNDTGVPLI EYSFYSDesL</p> <p>QYPKTVWIPY PKAGAVNPTV KFFIVNIDSL SSSSSAAPIQ IPAPASVARG DHYLCdVvWA</p> <p>TEERISLQWL RRIQNYSVMA ICDYDKINLT WNCpSEQqHV EMSTTGWvGR FRPAEPHfTS</p> <p>DGSSfYKiIS DKDGYKHICH FPKDKKdCTF ITKGAWeViS IEALTSDyLY YISNqYKEMP</p> <p>GGRNLYKiQL TDHTNVKCLS CDLNPERCQY YAVSfSKEAK YYQLGCWgPG LPLYTLhRST</p> <p>DHKELRVLED NSALDRMLQD VQMPSKKLDF iVLNETRFwY QMiLPPHfDK SKKYPLLLdV</p> <p>YAGPCSQKAD ASfRLNWATY LASTENiIVA SFDGRGSGYQ GDkiMHAINR RLGTLEVEDQ</p> <p>IEAARQfVKM GFVDSKRVAI WGWSYGGYVT SMVLGSGSGV FKCGIAVAPV SRWEYyDSVY</p>

TERYMGLPIP EDNLDHYRNS TVMSRAEHFK QVEYLLIHGT ADDNVHFQQS AQISKALVDA
GVDFQAMWYT DEDHGIASST AHQHIYSHMS HFLQQCFSLH

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) (Dipeptidyl peptidase IV) (DPP IV) (T-cell activation antigen CD26) (Thymocyte-activating molecule) (THAM) (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. Acts as a positive regulator of T-cell coactivation, by binding at least ADA, CAV1, IGF2R, and PTPRC. Its binding to CAV1 and CARD11 induces T-cell proliferation and NF-kappa-B activation in a T-cell receptor/CD3-dependent manner. Its interaction with ADA also regulates lymphocyte-epithelial cell adhesion. 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. May be involved in the promotion of lymphatic endothelial cells adhesion, migration and tube formation. When overexpressed, enhanced cell proliferation, a process inhibited by GPC3. 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. Removes N-terminal dipeptides sequentially from polypeptides having unsubstituted N-termini provided that the penultimate residue is proline. {ECO:0000250|UniProtKB:P27487}.

Molecular Weight: 87.4 kDa

UniProt: [P28843](#)

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: 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