

Datasheet for ABIN3125310 DPP9 Protein (AA 1-862) (Strep Tag)



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Overview

Quantity:	250 μg
Target:	DPP9
Protein Characteristics:	AA 1-862
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This DPP9 protein is labelled with Strep Tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA

Brand:	AliCE®
Sequence:	MCSGVSPVEQ VAAGDMDDTA ARFCVQKHSW DGLRSIIHGS RKSSGLIVSK APHDFQFVQK
	PDESGPHSHR LYYLGMPYGS RENSLLYSEI PKKVRKEALL LLSWKQMLDH FQATPHHGVY
	SREEELLRER KRLGVFGITS YDFHSESGLF LFQASNSLFH CRDGGKNGFM VSPMKPLEIK
	TQCSGPRMDP KICPADPAFF SFINNSDLWV ANIETGEERR LTFCHQGSAG VLDNPKSAGV
	ATFVIQEEFD RFTGCWWCPT ASWEGSEGLK TLRILYEEVD ESEVEVIHVP SPALEERKTD
	SYRYPRTGSK NPKIALKLAE LQTDHQGKIV SSCEKELVQP FSSLFPKVEY IARAGWTRDG
	KYAWAMFLDR PQQRLQLVLL PPALFIPAVE SEAQRQAAAR AVPKNVQPFV IYEEVTNVWI
	NVHDIFHPFP QAEGQQDFCF LRANECKTGF CHLYRVTVEL KTKDYDWTEP LSPTEDEFKC
	PIKEEVALTS GEWEVLSRHG SKIWVNEQTK LVYFQGTKDT PLEHHLYVVS YESAGEIVRL
	TTLGFSHSCS MSQSFDMFVS HYSSVSTPPC VHVYKLSGPD DDPLHKQPRF WASMMEAANC
	PPDYVPPEIF HFHTRADVQL YGMIYKPHTL QPGRKHPTVL FVYGGPQVQL VNNSFKGIKY

LRLNTLASLG YAVVVIDGRG SCQRGLHFEG ALKNQMGQVE IEDQVEGLQY VAEKYGFIDL SRVAIHGWSY GGFLSLMGLI HKPQVFKVAI AGAPVTVWMA YDTGYTERYM DVPENNQQGY EAGSVALHVE KLPNEPNRLL ILHGFLDENV HFFHTNFLVS QLIRAGKPYQ LQIYPNERHS IRCRESGEHY EVTLLHFLQE HL

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 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.

Product Details 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** DPP9 Target: Alternative Name: Dpp9 (DPP9 Products) Background: Dipeptidyl peptidase 9 (DP9) (EC 3.4.14.5) (Dipeptidyl peptidase IX) (DPP IX) (Dipeptidyl peptidase-like protein 9) (DPLP9), FUNCTION: Dipeptidyl peptidase that cleaves off N-terminal dipeptides from proteins having a Pro or Ala residue at position 2 (PubMed:24223149). Acts as a key inhibitor of caspase-1-dependent monocyte and macrophage pyroptosis in resting cells by preventing activation of NLRP1 and CARD8 (PubMed:27820798, PubMed:29396289). Sequesters the cleaved C-terminal part of NLRP1 and CARD8, which respectively constitute the active part of the NLRP1 and CARD8 inflammasomes, in a ternary complex, thereby preventing their oligomerization and activation (By similarity). The dipeptidyl peptidase activity is required to suppress NLRP1 and CARD8, however, neither NLRP1 nor CARD8 are bona fide substrates of DPP9, suggesting the existence of substrate(s) required for NLRP1 and CARD8 inhibition (By similarity). {ECO:0000250|UniProtKB:Q86TI2, ECO:0000269|PubMed:24223149, ECO:0000269|PubMed:27820798, ECO:0000269|PubMed:29396289}. Molecular Weight: 98.0 kDa UniProt: Q8BVG4 **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.

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Comment:

Application Details

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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