Datasheet for ABIN3118332

DC-SIGN/CD209 Protein (AA 1-404) (Strep Tag)

Go to Product page

Overview

Quantity:	1 mg
Target:	DC-SIGN/CD209 (CD209)
Protein Characteristics:	AA 1-404
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This DC-SIGN/CD209 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Sequence:	MSDSKEPRLQ QLGLLEEEQL RGLGFRQTRG YKSLAGCLGH GPLVLQLLSF TLLAGLLVQV SKVPSSISQE QSRQDAIYQN LTQLKAAVGE LSEKSKLQEI YQELTQLKAA VGELPEKSKL QEIYQELTRL KAAVGELPEK SKLQEIYQEL TWLKAAVGEL PEKSKMQEIY QELTRLKAAV GELPEKSKQQ EIYQELTRLK AAVGELPEKS KQQEIYQELT RLKAAVGELP EKSKQQEIYQ ELTQLKAAVE RLCHPCPWEW TFFQGNCYFM SNSQRNWHDS ITACKEVGAQ LVVIKSAEEQ NFLQLQSSRS NRFTWMGLSD LNQEGTWQWV DGSPLLPSFK QYWNRGEPNN VGEEDCAEFS GNGWNDDKCN LAKFWICKKS AASCSRDEEQ FLSPAPATPN PPPA **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 by multi-step, protein-specific process to ensure correct folding and modification.
- 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 will ensure that you receive a correctly folded 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 in several dilutions and is measured against its specific reference buffer.
- We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein.

Purification:	Two step purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®): 1. In a first purification step, the protein is purified from the cleared cell lysate using StrepTag capture material. Eluate fractions are analyzed by SDS-PAGE. 2. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatography. Eluate fractions are analyzed by SDS-PAGE and Western blot.

Product Details

Purity:	>80 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.
Endotoxin Level:	Low Endotoxin less than 1 EU/mg (< 0.1 ng/mg)

Target Details

Target:	DC-SIGN/CD209 (CD209)
Alternative Name:	CD209 (CD209 Products)
Background:	CD209 antigen (C-type lectin domain family 4 member L) (Dendritic cell-specific ICAM-3-grabbing non-integrin 1) (DC-SIGN) (DC-SIGN1) (CD antigen CD209),FUNCTION: Pathogen-recognition receptor expressed on the surface of immature dendritic cells (DCs) and involved in initiation of primary immune response. Thought to mediate the endocytosis of pathogens which are subsequently degraded in lysosomal compartments. The receptor returns to the cell membrane surface and the pathogen-derived antigens are presented to resting T-cells via MHC class II proteins to initiate the adaptive immune response. {ECO:0000269|PubMed:11859097}., FUNCTION: On DCs it is a high affinity receptor for ICAM2 and ICAM3 by binding to mannose-like carbohydrates. May act as a DC rolling receptor that mediates transendothelial migration of DC presursors from blood to tissues by binding endothelial ICAM2. Seems to regulate DC-induced T-cell proliferation by binding to ICAM3 on T-cells in the immunological synapse formed between DC and T-cells. {ECO:0000269|PubMed:10721995, ECO:0000269|PubMed:11017109, ECO:0000269|PubMed:12574325}., FUNCTION: (Microbial infection) Acts as an attachment receptor for HIV-1 and HIV-2. {ECO:0000269|PubMed:11799126, ECO:0000269|PubMed:12502850, ECO:0000269|PubMed:1518869}., FUNCTION: (Microbial infection) Acts as an attachment receptor for Ebolavirus. {ECO:0000269|PubMed:12502850, ECO:0000269|PubMed:12504546}., FUNCTION: (Microbial infection) Acts as an attachment receptor for Cytomegalovirus. {ECO:0000269|PubMed:12433371, ECO:0000269|PubMed:22496863}., FUNCTION: (Microbial infection) Acts as an attachment receptor for HCV. {ECO:0000269|PubMed:15371595, ECO:0000269|PubMed:16816373}., FUNCTION: (Microbial infection) Acts as an attachment receptor for Dengue virus. {ECO:0000269|PubMed:12682107}., FUNCTION: (Microbial infection) Acts as an attachment receptor for Measles virus. {ECO:0000269|PubMed:16537615}., FUNCTION: (Microbial infection) Acts as an attachment receptor for Herpes simplex virus 1. {ECO:0000269|PubMed:18796707}., FUNCTION: (Microbial infection) Acts as an attachment receptor for Influenzavirus A. {ECO:0000269|PubMed:21191006}., FUNCTION: (Microbial infection) Acts as an attachment receptor for SARS-CoV. {ECO:0000269|PubMed:15140961}., FUNCTION: (Microbial infection) Acts as an attachment receptor for Japanese encephalitis

Target Details

	virus. {ECO:0000269|PubMed:24623090}., FUNCTION: (Microbial infection) Acts as an attachment receptor for Lassa virus (PubMed:23966408). Acts as an attachment receptor for Marburg virusn. {ECO:0000269|PubMed:15479853}., FUNCTION: (Microbial infection) Acts as an attachment receptor for Respiratory syncytial virus. {ECO:0000269|PubMed:22090124}., FUNCTION: (Microbial infection) Acts as an attachment receptor for Rift valley fever virus and uukuniemi virus. {ECO:0000269|PubMed:21767814}., FUNCTION: (Microbial infection) Acts as an attachment receptor for West-nile virus. {ECO:0000269|PubMed:16415006}., FUNCTION: (Microbial infection) Probably recognizes in a calcium-dependent manner high mannose N-linked oligosaccharides in a variety of bacterial pathogen antigens, including Leishmania pifanoi LPG, Lewis-x antigen in Helicobacter pylori LPS, mannose in Klebsiella pneumonae LPS, di-mannose and tri-mannose in Mycobacterium tuberculosis ManLAM and Lewis-x antigen in Schistosoma mansoni SEA (PubMed:16379498). Recognition of M.tuberculosis by dendritic cells occurs partially via this molecule (PubMed:16092920, PubMed:21203928). {ECO:0000269|PubMed:16092920, ECO:0000269|PubMed:16379498, ECO:0000269|PubMed:21203928}.
Molecular Weight:	45.8 kDa
UniProt:	Q9NNX6

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 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. If you have a special request, please contact us.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	Unlimited (if stored properly)