Datasheet for ABIN3137209
DSCAM Protein (AA 1616-2013) (His tag)

Overview

Quantity:	1 mg
Target:	DSCAM
Protein Characteristics:	AA 1616-2013
Origin:	Mouse
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Purification tag / Conjugate:	This DSCAM protein is labelled with His tag.
Application:	ELISA, Western Blotting (WB), Crystallization (Crys), SDS-PAGE (SDS)

Product Details

Sequence:	VRRRRREQRL KRLRDAKSLA EMLMSKNTRT SDTLSKQQQT LRMHIDIPRA QLLIEERDTM ETIDDRSTVL LTDADFGEAA KQKSLTVTHT VHYQSVSQAT GPLVDVSDAR PGTNPTTRRN AKAGPTARNR YASQWTLNRP HPTISAHTLT TDWRLPTPRA TGSVDKESDS YSVSPSQDTD RARSSMVSTE SASSTYEELA RAYEHAKMEE QLRHAKFTIT ECFISDTSSE QLTAGTNEYT DSLTSSTPSE SGICRFTASP PKPQDGGRVV NMAVPKAHRP GDLIHLPPYL RMDFLLNRGA PGTSRDLSLG QACLEPQKSR TLKRPTVLEP TPMEASSSTS STREGQQSWQ QGAVATLPQR EGAELGQAAK MSSSQESLLD SRGHLKGNNP YAKSYTLV **Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a special request, please contact us.**
Characteristics:	• Made in Germany - from design to production - by highly experienced protein experts. • Mouse Dscam Protein (raised in E. Coli) purified by multi-step, protein-specific process to ensure crystallization grade.

Product Details

- 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.

In the unlikely event that the protein cannot be expressed or purified we do not charge anything (other companies might charge you for any performed steps in the expression process for custom-made proteins, e.g. fees might apply for the expression plasmid, the first expression experiments or purification optimization).

When you order this made-to-order protein you will only pay upon receival of the correctly folded protein. With no financial risk on your end you can rest assured that our experienced protein experts will do everything to make sure that you receive the protein you ordered.

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.

The concentration of the protein is calculated using its specific absorption coefficient. We use the Expasy's protparam tool to determine the absorption coefficient of each protein.

Purification:	Two step purification of proteins expressed in bacterial culture: 1. In a first purification step, the protein is purified from the cleared cell lysate using three different His-tag capture materials: high yield, EDTA resistant, or DTT resistant. 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.
Purity:	>95 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.
Sterility:	0.22 µm filtered
Endotoxin Level:	Endotoxin has not been removed. Please contact us if you require endotoxin removal.
Grade:	Crystallography grade

Target Details

Target:	DSCAM
Alternative Name:	Dscam (DSCAM Products)

Target Details

Background:	Cell adhesion molecule that plays a role in neuronal self-avoidance. Promotes repulsion between specific neuronal processes of either the same cell or the same subtype of cells. Mediates within retinal amacrine and ganglion cell subtypes both isoneuronal self-avoidance for creating an orderly dendritic arborization and heteroneuronal self-avoidance to maintain the mosaic spacing between amacrine and ganglion cell bodies (PubMed:18216855, PubMed:19196994, PubMed:19945391). Receptor for netrin required for axon guidance independently of and in collaboration with the receptor DCC (PubMed:18585357). In spinal chord development plays a role in guiding commissural axons projection and pathfinding across the ventral midline to reach the floor plate upon ligand binding. Enhances netrin-induced phosphorylation of PAK1 and FYN. Mediates intracellular signaling by stimulating the activation of MAPK8 and MAP kinase p38. Adhesion molecule that promotes lamina-specific synaptic connections in the retina: expressed in specific subsets of interneurons and retinal ganglion cells (RGCs) and promotes synaptic connectivity via homophilic interactions (By similarity). {ECO:0000250|UniProtKB:F1NY98, ECO:0000250|UniProtKB:O60469, ECO:0000269|PubMed:18216855, ECO:0000269|PubMed:18585357, ECO:0000269|PubMed:19196994, ECO:0000269|PubMed:19945391}.
Molecular Weight:	45.0 kDa Including tag.
UniProt:	Q9ERC8
Pathways:	Regulation of Cell Size

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 gurantee though.
Comment:	Protein has not been tested for activity yet. In cases in which it is highly likely that the recombinant protein with the default tag will be insoluble our protein lab may suggest a higher molecular weight tag (e.g. GST-tag) instead to increase solubility. We will discuss all possible options with you in detail to assure that you receive your protein of interest.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	100 mM NaCL, 20 mM Hepes, 10% glycerol. pH value is at the discretion of the manufacturer.

Handling

Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	Unlimited (if stored properly)