

Datasheet for ABIN3136389

DCLRE1B Protein (AA 1-541) (His tag)**1** Image[Go to Product page](#)

Overview

Quantity:	1 mg
Target:	DCLRE1B
Protein Characteristics:	AA 1-541
Origin:	Mouse
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This DCLRE1B protein is labelled with His tag.
Application:	ELISA, Western Blotting (WB), Crystallization (Crys), SDS-PAGE (SDS)

Product Details

Sequence:	MNGVVIPQTP IAVDFWSLRR AGSARLFFLT HMHCDHTVGL SSTWARPLYC SPITACLLHR RLQVSKHWIR ALEVGESHVL PLDEIGQETM TVTLIDANHC PGSVMFLFEG YFGTILYTGD FRYTPSMLKE PALILGKQIH TLYLDNTNCN PALVLPSRQE ATQQIVQLIR QFPQHNIKIG LYSLGKESLL EQLALEFRTW VVLSPQRLEL VQLLGLADV FVEEEAGRIH AVDHTEICH S AMLQWNQSHPTIAIFPTSRK VRSPHPSIYT VPYSDHSSYS ELRAFVAALR PCQVVPVHQ KPCGEFFQDS LSPRLAMPLI PHSVQQYMSS SSRKTNLWQ LERRLKRPT QGVVFESPEE KANQVKVDRD SKKHKKENLS PWAGHLERLC PHPLQARKQL FPDFCRKERD EPVLCDSNK MATVLTAPLE FSVQLQPIDE FLFPETREKI GLESPLLSRG DSGSPARGNQ SDCVGCSP AHISRAVPLT PESRGLALKY LLTPVHFLQA GFSSRNFDKQ VEKHQRVQRS SPAVLSPVDV G Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a special request, please contact us.
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Product Details

- Characteristics:
- Made in Germany - from design to production - by highly experienced protein experts.
 - Mouse Dclre1b Protein (raised in Insect Cells) purified by multi-step, protein-specific process to ensure crystallization grade.
 - 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 receipt 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 baculovirus infected SF9 insect cells:
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: Protein is endotoxin free.

Grade: Crystallography grade

Target Details

Target:	DCLRE1B
Alternative Name:	Dclre1b (DCLRE1B Products)
Background:	5'-3' exonuclease that plays a central role in telomere maintenance and protection during S-phase. Participates in the protection of telomeres against non-homologous end-joining (NHEJ)-mediated repair, thereby ensuring that telomeres do not fuse. Plays a key role in telomeric loop (T loop) formation by being recruited by TERF2 at the leading end telomeres and by processing leading-end telomeres immediately after their replication via its exonuclease activity: generates 3' single-stranded overhang at the leading end telomeres avoiding blunt leading-end telomeres that are vulnerable to end-joining reactions and expose the telomere end in a manner that activates the DNA repair pathways. Together with TERF2, required to protect telomeres from replicative damage during replication by controlling the amount of DNA topoisomerase (TOP1, TOP2A and TOP2B) needed for telomere replication during fork passage and prevent aberrant telomere topology. Also involved in response to DNA damage: plays a role in response to DNA interstrand cross-links (ICLs) by facilitating double-strand break formation. In case of spindle stress, involved in prophase checkpoint. {ECO:0000269 PubMed:20551906, ECO:0000269 PubMed:20619712}.
Molecular Weight:	62.0 kDa Including tag.
UniProt:	Q8C7W7

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:	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)

Images



Image 1. „Crystallography Grade“ protein due to multi-step, protein-specific purification process