

## Datasheet for ABIN7564524

# DCLRE1B Protein (AA 1-541) (His tag)



### Overview

Quantity:	1 mg
Target:	DCLRE1B
Protein Characteristics:	AA 1-541
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This DCLRE1B protein is labelled with His tag.

Product Details	
Purpose:	Custom-made recombinant Dclre1b Protein expressed in mammalian cells.
Sequence:	MNGVVIPQTP IAVDFWSLRR AGSARLFFLT HMHCDHTVGL SSTWARPLYC SPITACLLHR
	RLQVSKHWIR ALEVGESHVL PLDEIGQETM TVTLIDANHC PGSVMFLFEG YFGTILYTGD
	FRYTPSMLKE PALILGKQIH TLYLDNTNCN PALVLPSRQE ATQQIVQLIR QFPQHNIKIG
	LYSLGKESLL EQLALEFRTW VVLSPQRLEL VQLLGLADVF TVEEEAGRIH AVDHTEICHS
	AMLQWNQSHP TIAIFPTSRK VRSPHPSIYT VPYSDHSSYS ELRAFVAALR PCQVVPIVHQ
	KPCGEFFQDS LSPRLAMPLI PHSVQQYMSS SSRKTNVLWQ LERRLKRPRT QGVVFESPEE
	KANQVKVDRD SKKHKKENLS PWAGHLERLC PHPLQARKQL FPDFCRKERD EPVLFCDSNK
	MATVLTAPLE FSVQLQPIDE FLFPETREKI GLESPLLSRG DSGSPARGNQ SDCVGCGSPP
	AHISRAVPLT PESRGLALKY LLTPVHFLQA GFSSRNFDKQ VEKHQRVQRS SPAVLSPVDV G
	Sequence without tag. The proposed Purification-Tag is based on experiences 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.

#### **Product Details**

Specificity:	If you are looking for a specific domain and are interested in a partial protein or a different
opcomony.	isoform, please contact us regarding an individual offer.
	isotorm, please contact as regarding an individual orier.
Characteristics:	Key Benefits:
	Made to order protein - from design to production - by highly experienced protein experts.
	Protein expressed in mammalian cells and purified in one-step affinity chromatography
	The optimized expression system ensures reliability for intracellular, secreted and
	transmembrane proteins.
	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.
	If you are not interested in a full length protein, please contact us for individual protein
	fragments.
	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.
Purity:	> 90 % as determined by Bis-Tris PAGE, anti-tag ELISA, Western Blot and analytical SEC (HPL
Grade:	custom-made
Target Details	
Target:	DCLRE1B
Alternative Name:	Dclre1b (DCLRE1B Products)
Background:	5' exonuclease Apollo (EC 3.1) (Beta-lactamase MBLAC2) (EC 3.5.2.6) (DNA cross-link repa
	1B protein) (SNM1 homolog B),FUNCTION: 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 th
	telomeres do not fuse. Plays a key role in telomeric loop (T loop) formation by being recruite
	by TEDE2 at the leading and telemores and by presenting leading and telemores immediate

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. Possesses beta-lactamase activity, catalyzing the hydrolysis of penicillin G and nitrocefin (By similarity). Exhibits no activity towards other beta-lactam antibiotic classes including cephalosporins (cefotaxime) and carbapenems (imipenem) (By similarity). {ECO:0000250|UniProtKB:Q9H816, ECO:0000269|PubMed:20551906, ECO:0000269|PubMed:20619712}.

Molecular Weight:

61.1 kDa

UniProt:

08C7W7

12 months

## **Application Details**

Application Notes: We expect the protein to work for functional studies. As the protein has not been tested for

functional studies yet we cannot offer a guarantee though.

Restrictions: For Research Use only

## Handling

**Expiry Date:** 

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.