Datasheet for ABIN7553659

DCLRE1B Protein (AA 1-532) (His tag)

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Overview

Quantity:	1 mg
Target:	DCLRE1B
Protein Characteristics:	AA 1-532
Origin:	Human
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:	MNGVLIPHTP IAVDFWSLRR AGTARLFFLS HMHSDHTVGL SSTWARPLYC SPITAHLLHR HLQVSKQWIQ ALEVGESHVL PLDEIGQETM TVTLLDANHC PGSVMFLFEG YFGTILYTGD FRYTPSMLKE PALTLGKQIH TLYLDNTNCN PALVLPSRQE AAHQIVQLIR KHPQHNIKIG LYSLGKESLL EQLALEFQTW VVLSPRRLEL VQLLGLADVF TVEEKAGRIH AVDHMEICHS NMLRWNQTHP TIAILPTSRK IHSSHPDIHV IPYSDHSSYS ELRAFVAALK PCQVVPIVSR RPCGGFQDSL SPRISVPLIP DSVQQYMSSS SRKPSLLWLL ERRLKRPRTQ GVVFESPEES ADQSQADRDS KKAKKEKLSP WPADLEKQPS HHPLRIKKQL FPDLYSKEWN KAVPFCESQK RVTMLTAPLG FSVHLRSTDE EFISQKTREE IGLGSPLVPM GDDDGGPEAT GNQSAWMGHG SPLSHSSKGT PLLATEFRGL ALKYLLTPVN FFQAGYSSRR FDQQVEKYHK PC **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 isoform, please contact us regarding an individual offer.
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 (HPLC)
Grade:	custom-made

Target Details

Target:	DCLRE1B
Alternative Name:	DCLRE1B (DCLRE1B Products)
Background:	5' exonuclease Apollo (EC 3.1.-.-) (Beta-lactamase DCLRE1B) (EC 3.5.2.6) (DNA cross-link repair 1B protein) (SNM1 homolog B) (SNMIB) (hSNM1B),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 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

Target Details

	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 (PubMed:31434986). Exhibits no activity towards other beta-lactam antibiotic classes including cephalosporins (cefotaxime) and carbapenems (imipenem) (PubMed:31434986). {ECO:0000269|PubMed:15467758, ECO:0000269|PubMed:15572677, ECO:0000269|PubMed:16730175, ECO:0000269|PubMed:16730176, ECO:0000269|PubMed:18468965, ECO:0000269|PubMed:18469862, ECO:0000269|PubMed:19197158, ECO:0000269|PubMed:19411856, ECO:0000269|PubMed:20655466, ECO:0000269|PubMed:31434986}.
Molecular Weight:	60.0 kDa
UniProt:	Q9H816

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

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.
Expiry Date:	12 months