

Datasheet for ABIN7553636

DCLRE1C Protein (AA 1-692) (His tag)



[Go to Product page](#)

Overview

Quantity:	1 mg
Target:	DCLRE1C
Protein Characteristics:	AA 1-692
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This DCLRE1C protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant DCLRE1C Protein expressed in mammalian cells.
Sequence:	<p>MSSFEGQMAE YPTISIDRFD RENLRARAYF LSHCHKDHMK GLRAPTLKRR LECSLKVYLY CSPVTKELLL TSPKYRFWKK RIISIEIETP TQISLVDEAS GEKEEIVVTI LPAGHCPSGV MFLFQGNNGT VLYTGDFRLA QGEAARMELL HSGGRVKDIQ SVYLDTTFCF PRFYQIPSRE ECLSGVLELV RSWITRSPYH VVWLNCKAAY GYEYLFNTLS EELGVQVHVN KLDMFRNMPE ILHHLTTDRN TQIHACRHPK AEEYFQWSKL PCGITSRNRI PLHIISIKPS TMWFGERSRK TNVIVRTGES SYRACFSFHS SYSEIKDFLS YLCPVNAYPN VIPVGTTMDK VVEILKPLCR SSQSTEPKYK PLGKLKRART VHRDSEEDD YLFDDPLPIP LRHKVPYPET FHPEVFSMTA VSEKQPEKLR QTPGCCRAEC MQSSRFTNFV DCEESNSESE EEVGIPASLQ GDLGSVLHLQ KADGDVPQWE VFFKRNDIT DESLENFPSS TVAGGSQSPK LFSDDSGEST HISSQNSSQS THITEQGSQG WDSQSDTVLL SSQERNSGDI TSLDKADYRP TIKENIPASL MEQNVICPKD TYSDLKSRDK DVTIVPSTGE PTTLSSETHI PEEKSLLNLS TNADSQSSSD FEVPSTPEAE LPKREHLQYL YEKLATGESI AVKKRKCSLL DT Sequence without tag. The proposed</p>

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.

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: DCLRE1C

Alternative Name: DCLRE1C ([DCLRE1C Products](#))

Background: Protein artemis (EC 3.1.-.-) (DNA cross-link repair 1C protein) (Protein A-SCID) (SNM1 homolog C) (hSNM1C) (SNM1-like protein),FUNCTION: Nuclease involved in DNA non-homologous end joining (NHEJ), required for double-strand break repair and V(D)J recombination (PubMed:11336668, PubMed:11955432, PubMed:12055248, PubMed:14744996, PubMed:15071507, PubMed:15574326, PubMed:15936993). Required for V(D)J recombination, the process by which exons encoding the antigen-binding domains of immunoglobulins and T-cell receptor proteins are assembled from individual V, (D), and J gene segments (PubMed:11336668, PubMed:11955432, PubMed:14744996). V(D)J recombination is initiated

Target Details

by the lymphoid specific RAG endonuclease complex, which generates site specific DNA double strand breaks (DSBs) (PubMed:11336668, PubMed:11955432, PubMed:14744996). These DSBs present two types of DNA end structures: hairpin sealed coding ends and phosphorylated blunt signal ends (PubMed:11336668, PubMed:11955432, PubMed:14744996). These ends are independently repaired by the non homologous end joining (NHEJ) pathway to form coding and signal joints respectively (PubMed:11336668, PubMed:11955432, PubMed:14744996). This protein exhibits single-strand specific 5'-3' exonuclease activity in isolation and acquires endonucleolytic activity on 5' and 3' hairpins and overhangs when in a complex with PRKDC (PubMed:15071507, PubMed:15574326, PubMed:11955432, PubMed:15936993). The latter activity is required specifically for the resolution of closed hairpins prior to the formation of the coding joint (PubMed:11955432). Also required for the repair of complex DSBs induced by ionizing radiation, which require substantial end-processing prior to religation by NHEJ (PubMed:15456891, PubMed:15468306, PubMed:15574327, PubMed:15811628).

{ECO:0000269|PubMed:11336668, ECO:0000269|PubMed:11955432, ECO:0000269|PubMed:12055248, ECO:0000269|PubMed:14744996, ECO:0000269|PubMed:15071507, ECO:0000269|PubMed:15456891, ECO:0000269|PubMed:15468306, ECO:0000269|PubMed:15574326, ECO:0000269|PubMed:15574327, ECO:0000269|PubMed:15811628, ECO:0000269|PubMed:15936993}.

Molecular Weight: 78.4 kDa

UniProt: [Q96SD1](#)

Pathways: [DNA Damage Repair](#)

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.

Handling

Storage:	-80 °C
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Storage Comment:	Store at -80°C.
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Expiry Date:	12 months
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