

Rabbit DCLRE1C Polyclonal Antibody | anti-DCLRE1C antibody

DCLRE1C Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA327117	Rabbit	Human, Mouse, Rat	ELISA, Immunocytochemistry, Immunofluorescence, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

DCLRE1C; Polyclonal Antibody; DCLRE1C Antibody; A SCID; A SCID protein; Artemis protein; ASCID; DCLRE1C DNA cross link repair 1C; DCLRE1C protein; DCLREC1C; DCR1C_HUMAN; DNA cross link repair 1C; DNA cross link repair 1C protein; DNA cross-link repair 1C protein; FLJ11360; FLJ36438; hSNM1C; OTTHUMP00000045150; Protein A-SCID; Protein ARTEMIS; PSO2 homolog; RS SCID; SCIDA; Severe combined immunodeficiency type a; SNM1 homolog C; SNM1 like protein; SNM1-like protein; SNM1C; anti-DCLRE1C antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	DCLRE1C antibody detects endogenous levels of total DCLRE1C
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	692
Applicable Applications for anti-DCLRE1C antibody	ELISA, ICC (Immunocytochemistry), IF (Immunofluorescence), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human DCLRE1C
Subcellular Location	Nucleus.
Tissue Specificity	Ubiquitously expressed, with highest levels in the kidney, lung, pancreas and placenta (at the mRNA level). Expression is not increased in thymus or bone marrow, sites of V(D)J recombination.
Predicted Cross Reactivity	Pig, Bovine, Horse, Sheep, Rabbit
Similarity	Pig (90%), Bovine (80%), Horse (90%), Sheep (90%), Rabbit (100%)
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



IHC (Immunohistochemistry)
AAA327117 at 1/100 staining Mouse kidney tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.



WB (Western Blot)
Western blot analysis of HeLa whole cell lysates, using DCLRE1C Antibody. The lane on the left is treated with the antigen-specific peptide.



IF (Immunofluorescence)
AAA327117 staining HepG2 by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25 degree C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37 degree C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) Ab, diluted at 1/600, was used as the secondary antibody.

ADDITIONAL INFORMATION

Related Product Information for anti-DCLRE1C antibody

Description: This gene encodes a nuclear protein that is involved in V(D)J recombination and DNA repair. The protein has single-strand-specific 5'-3' exonuclease activity; it also exhibits endonuclease activity on 5' and 3' overhangs and hairpins when complexed with protein kinase, DNA-activated, catalytic polypeptide. Mutations in this gene cause Athabaskan-type severe combined immunodeficiency (SCIDA).

Function: 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. V(D)J recombination is initiated by the lymphoid specific RAG endonuclease complex, which generates site specific DNA double strand breaks (DSBs). These DSBs present two types of DNA end structures: hairpin sealed coding ends and phosphorylated blunt signal ends. These ends are independently repaired by the non homologous end joining (NHEJ) pathway to form coding and signal joints respectively. 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. The latter activity is required specifically for the resolution of closed hairpins prior to the formation of the coding joint. May also be required for the repair of complex DSBs induced by ionizing radiation, which require substantial end-processing prior to religation by NHEJ.

Subunit Structure: Interacts with ATM, BRCA1, PRKDC and TP53BP1. Also exhibits ATM-and phosphorylation-dependent interaction with the MRN complex, composed of MRE11, RAD50, and NBN.

Post-translational Modifications: Phosphorylation on undefined residues by PRKDC may stimulate endonucleolytic activity on 5' and 3' hairpins and overhangs. PRKDC must remain present, even after phosphorylation, for efficient hairpin opening. Also phosphorylated by ATM in response to ionizing radiation (IR) and by ATR in response to ultraviolet (UV) radiation.

Similarity: Belongs to the DNA repair metallo-beta-lactamase (DRMBL) family.

NCBI AND UNIPROT INFORMATION

NCBI GI #	76496497
NCBI GeneID	64421
NCBI Accession #	NP_001029027.1
NCBI GenBank Nucleotide #	NM_001033855.2
UniProt Accession #	Q96SD1; Q1HCL2; Q5JSR4; Q5JSR5; Q5JSR7; Q5JSR8; Q5JSR9; Q5JSS0; Q5JSS7; Q6PK14; Q8N101; D3DRT6
Molecular Weight	Observed: 78 kDa Predicted: 79 kDa
NCBI Official Full Name	protein artemis isoform a

NCBI Official Synonym Full Names	DNA cross-link repair 1C
NCBI Official Symbol	DCLRE1C
NCBI Official Synonym Symbols	SCIDA; SNM1C; A-SCID; RS-SCID; DCLREC1C
NCBI Protein Information	protein artemis
UniProt Protein Name	Protein artemis
UniProt Gene Name	DCLRE1C
UniProt Synonym Gene Names	ARTEMIS; ASCID; SCIDA; SNM1C; hSNM1C

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/dclre1c-antibody-immunocytochemistry-immunofluorescence-immunohistochemistry-western-blot-elisa/327117>