

**Product Name: Phospho-Artemis (Ser516) Rabbit Polyclonal Antibody**  
**Catalog #: APRab00839**

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## Summary

<b>Production Name</b>	Phospho-Artemis (Ser516) Rabbit Polyclonal Antibody
<b>Description</b>	Primary antibody
<b>Host</b>	Rabbit
<b>Application</b>	WB,IHC-P,ELISA
<b>Reactivity</b>	Human,Mouse

## Performance

<b>Conjugation</b>	Unconjugated
<b>Modification</b>	Phosphorylated
<b>Isotype</b>	IgG
<b>Clonality</b>	Polyclonal Antibody
<b>Form</b>	Liquid
<b>Storage</b>	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
<b>Buffer</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide, pH 7.3.
<b>Purification</b>	Affinity Chromatography

## Immunogen

<b>Gene Name</b>	DCLRE1C
<b>Alternative Names</b>	SCIDA; SNM1C; A-SCID; RS-SCID; DCLREC1C
<b>Gene ID</b>	64421
<b>SwissProt ID</b>	Q96SD1

## Application

<b>Dilution Ratio</b>	WB: 1/500-1/1000 IHC: 1/50-1/100 ELISA: 1/10000
<b>Molecular Weight</b>	Calculated MW: 78 kDa; Observed MW: 78 kDa

## Background

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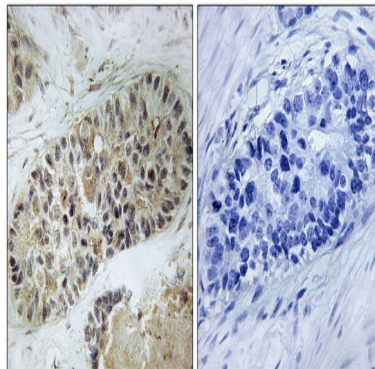
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Required for V(D)J recombination, the process by which exons encoding the antigen-binding domains of immunoglobulins and T-cell receptor proteins are assembled from individual V, (D), and J gene segments. V(D)J recombination is initiated by the lymphoid 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.

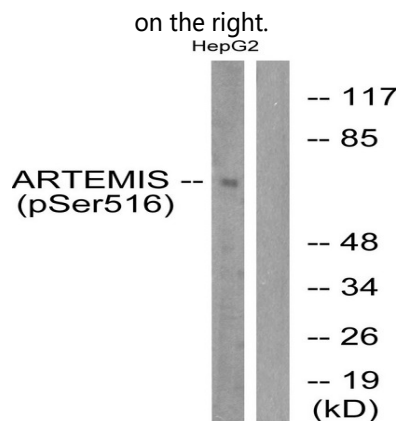
### Research Area

Epigenetics and Nuclear Signaling

### Image Data



Immunohistochemistry analysis of paraffin-embedded Human lung carcinoma, using Phospho-Artemis (Ser516) antibody. High-pressure and temperature Sodium Citrate pH 6.0 was used for antigen retrieval. Sample with blocking peptide



Western blot analysis of Phospho-Artemis (Ser516) in HepG2 cells treated with EGF, using Phospho-Artemis (Ser516)

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antibody. The lane on the right is blocked with the Phospho- peptide.

**Note**

For research use only.