

## PHOSPHO-ARTEMIS (SER516) RABBIT PAB

**Cat.#:** N225487

**Product Name:** Anti-Phospho-Artemis (Ser516) Rabbit pAb

**Synonyms:** SCIDA; SNMIC; A-SCID; RS-SCID; DCLREC1C

**UNIPROT ID:** Q96SD1

**Background:** 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.

**Immunogen:** The antiserum was produced against synthesized peptide derived from human Artemis around the phosphorylation site of Ser516. AA range:482-531

**Applications:** WB,IHC-P,ELISA

**Recommended Dilutions:** WB: 1/500-1/1000 IHC: 1/50-1/100 ELISA: 1/10000

**Host Species:** Rabbit

**Clonality:** Rabbit Polyclonal

**Clone ID:** -

**MW:** Calculated MW: 78 kDa; Observed MW: 78 kDa

**Isotype:** IgG

**Purification:** Affinity Chromatography

**Species Reactivity:** Human,Mouse

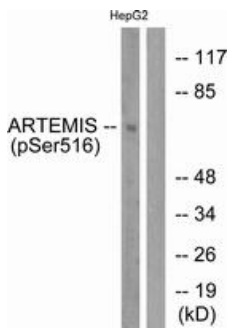
**Conjugation:** Unconjugated

**Modification:** Phosphorylated

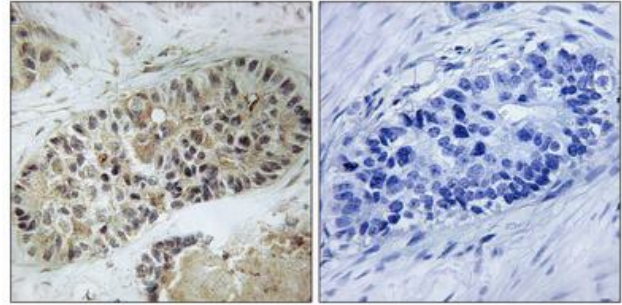
**Constituents:** PBS (without Mg<sup>2+</sup> and Ca<sup>2+</sup>), pH 7.3 containing 50% glycerol, 0.5% BSA and 0.02% sodium azide

**Research Areas:** Epigenetics and Nuclear Signaling

**Storage & Shipping:** Store at -20°C. Avoid repeated freezing and thawing



Western blot analysis of Phospho-Artemis (Ser516) in HepG2 cells treated with EGF, using Phospho-Artemis (Ser516) antibody. The lane on the right is blocked with the Phospho-peptide.



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 on the right.