# DEK (C-17): sc-26815



The Power to Question

#### **BACKGROUND**

The mammalian nuclear phosphoprotein DEK is implicated in multiple cellular processes, including transcriptional regulation, mRNA processing, and chromatin remodeling, and is associated with a number of clinical autoimmune and neoplastic conditions. DEK, an abundant chromatin-associated protein, changes the topology of DNA in chromatin *in vitro*. Although first identified in a fusion with the CAN/Nup214 nucleoporin protein in a specific subtype of acute myelogenous leukemia, DEK is also an autoantigen in patients with Pauciarticular onset juvenile rheumatoid arthritis. Further-more, the last 65 amino acids of DEK can partially reverse the mutation-prone phenotype of cells from patients with ataxia-telangiectasia. The human DEK gene maps to chromosome 6p22.3.

### **REFERENCES**

- Fu, G.K., et al. 1997. DEK, an autoantigen involved in a chromosomal translocation in acute myelogenous leukemia, binds to the HIV-2 enhancer. Proc. Natl. Acad. Sci. USA 94: 1811-1815.
- McGarvey, T., et al. 2000. The acute myeloid leukemia-associated protein, DEK, forms a splicing-dependent interaction with exon-product complexes. J. Cell Biol. 150: 309-320.
- 3. Kappes, F., et al. 2001. Subcellular localization of the human proto-oncogene protein DEK. J. Biol. Chem. 276: 26317-26323.
- Sitwala, K.V., et al. 2002. YY1 and NF-Y binding sites regulate the transcriptional activity of the DEK and DEK-CAN promoter. Oncogene 21: 8862-8870.
- Waldmann, T., et al. 2002. The ubiquitous chromatin protein DEK alters the structure of DNA by introducing positive supercoils. J. Biol. Chem. 277: 24988-24994.

## **CHROMOSOMAL LOCATION**

Genetic locus: DEK (human) mapping to 6p22.3.

## **SOURCE**

DEK (C-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of DEK of human origin.

#### **PRODUCT**

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-26815 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### **STORAGE**

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

#### **RESEARCH USE**

For research use only, not for use in diagnostic procedures.

#### **APPLICATIONS**

DEK (C-17) is recommended for detection of DEK of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

DEK (C-17) is also recommended for detection of DEK in additional species, including equine, canine and bovine.

Suitable for use as control antibody for DEK siRNA (h): sc-38253, DEK shRNA Plasmid (h): sc-38253-SH and DEK shRNA (h) Lentiviral Particles: sc-38253-V.

Molecular Weight of DEK: 43-45 kDa.

Positive Controls: K-562 nuclear extract: sc-2130, Jurkat whole cell lysate: sc-2204 or HeLa whole cell lysate: sc-2200.

#### **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

#### **PROTOCOLS**

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



Try **DEK (2): sc-136222**, our highly recommended monoclonal alternative to DEK (C-17).

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