

DEK (N-21): sc-26813

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. Furthermore, 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

1. 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.
2. 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.
4. 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.
5. 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 (N-21) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of DEK of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-26813 P, (100 µg 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 (N-21) 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), immunohistochemistry (including paraffin-embedded sections) (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 (N-21) is also recommended for detection of DEK in additional species, including porcine.

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.

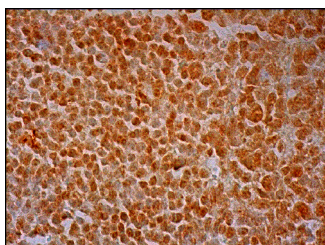
Molecular Weight of DEK: 43-45 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, K-562 nuclear extract: sc-2130 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. 3) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



DEK (N-21): sc-26813. Immunoperoxidase staining of formalin fixed, paraffin-embedded human tonsil tissue showing nuclear staining of cells in germinal center and cells in non-germinal center.

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 (N-21).