Technical Data Sheet

Purified Mouse Anti-Human DEK

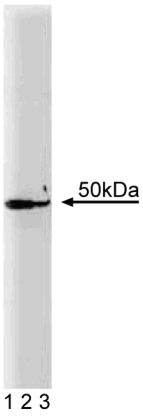
Product Information

Material Number:	**610948**
Size:	50 µg
Concentration:	250 µg/ml
Clone:	2/DEK
Immunogen:	Human DEK aa. 19-169
Isotype:	Mouse IgG1
Reactivity:	QC Testing: Human
Target MW:	50 kDa
Storage Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium azide.

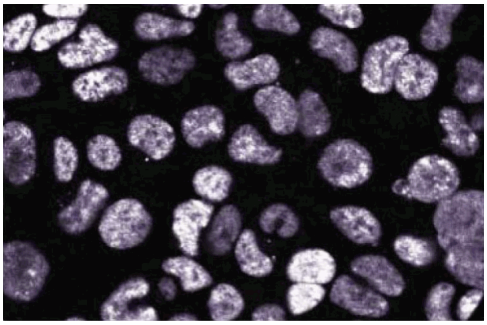
Description

The (6;9) chromosomal translocation is associated with acute myelogenousleukemia (AML) and fuses the dek and can genes. This results in expression of the oncogenic DEK-CAN fusion protein, consisting of the N-terminal two-thirds of DEK and the C-terminal two-thirds of CAN. Although, on its own, DEK exhibits anti-oncogenic properties, the DEK-CAN chimera appears to be oncogenic. DEK is a nuclear protein with a calculated molecular weight of 42-43 kD, that can be observable at 50 kD, and reportedly exhibits no substantial homology to any known protein sequences. Although it contains 42% charged amino acids and multiple acidic sequences, specific structural features have yet to be identified. In addition to its involvement in AML, DEK is associated with several disease states, such as juvenile rheumatoid arthritis where it is an autoantigen. Efforts to define the cellular function of DEK led to its identification as the pets factor. The peri-ets (pets) site is a TG-rich element between the two Elf-1 binding sites of the HIV-2 enhancer. The pets site mediates transcriptional activation in response to T cell stimulation. Thus, DEK is a site-specific DNA binding protein that functions in transcriptional regulation and signal transduction.

This antibody is routinely tested by western blot analysis. Other applications were tested at BD Biosciences Pharmingen during antibody development only or reported in the literature.



Western blot analysis of DEK on a Jurkat cell lysate. *1:500 (lane 1), 1:1000 (lane 2), 1:2000 (lane 3) dilution of the anti- human DEK antibody.*



Immunofluoresence staining on 293 cells.

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.
Store undiluted at -20° C.

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Application Notes

Application

Western blot	Routinely Tested
Immunofluorescence	Tested During Development

Suggested Companion Products

Catalog Number	Name	Size	Clone
611451	Jurkat Cell Lysate	500 µg	(none)
554002	HRP Goat Anti-Mouse Igs	1.0 ml	(none)
554001	FITC Goat Anti-Mouse Igs	0.5 mg	Polyclonal

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.

References

Fu GK, Grosveld G, Markovitz DM. DEK, an autoantigen involved in a chromosomal translocation in acute myelogenous leukemia, binds to the HIV-2 enhancer. *Proc Natl Acad Sci U S A.* 1997; 94(5):1811-1815.(Biology)

Fu GK, Markovitz DM. Purification of the pets factor. A nuclear protein that binds to the inducible TG-rich element of the human immunodeficiency virus type 2 enhancer. *J Biol Chem.* 1996; 271(32):19599-19605.(Biology)

von Lindern M, Fornerod M, van Baal S, et al. The translocation (6;9), associated with a specific subtype of acute myeloid leukemia, results in the fusion of two genes, dek and can, and the expression of a chimeric, leukemia-specific dek-can mRNA. *Mol Cell Biol.* 1992; 12(4):1687-1697.(Biology)