

LD Biopharma, Inc. 9924 Mesa Rim Road, Suite B San Diego, CA 92121 Tel: 858-876-8266 http://www.ldbiopharma.com

- PRODUCT DATA SHEET -

Name of Product:Recombinant Human DEK ProteinCatalog Number:hTF-1614Manufacturer:LD Biopharma, Inc.

Introduction

Human DEK gene encodes a protein with one SAP domain. This protein binds to cruciform and superhelical DNA and induces positive supercoils into closed circular DNA, and is also involved in splice site selection during mRNA processing. Chromosomal aberrations involving this region, increased expression of this gene, and the presence of antibodies against this protein are all associated with various diseases. Two transcript variants encoding different isoforms have been found for this gene.

Full-length human DEK (374aa, Isoform-1) gene was constructed with 29 aa N-terminal T7 / His / TEV cleavage site Tag and expressed in E.coli as inclusion bodies. It was refolded using our unique "temperature shift inclusion body refolding" technology and chromatographically purified.

Gene Symbol:	DEK (D6S231E)
Accession Number:	NP_003463.1
Species:	Human
Size:	25 µg / Vial
Composition:	0.25 mg/ml, sterile-filtered, in 20 mM pH 8.0 Tris-HCl Buffer, with proprietary formulation of NaCl, KCl, EDTA, Sucrose and DTT.
Storage:	In Liquid. Keep at -80°C for long term storage. Product is stable at 4 °C for at least 7 days.

Key References

Wang J, et al., *DEK depletion negatively regulates Rho/ROCK/MLC pathway in non*small cell lung cancer. J. Histochem. Cytochem. 61 (7), 510-521 (2013)



LD Biopharma, Inc. 9924 Mesa Rim Road, Suite B San Diego, CA 92121 Tel: 858-876-8266 http://www.ldbiopharma.com

Saha AK, et al., *Intercellular trafficking of the nuclear oncoprotein DEK*. Proc. Natl. Acad. Sci. U.S.A. 110 (17), 6847-6852 (2013)

Lin L, et al., *DEK over expression as an independent biomarker for poor prognosis in colorectal cancer*. BMC Cancer 13, 366 (2013)

Wang DM, et al., *Expression level of DEK in chronic lymphocytic leukemia is regulated by fludarabine and Nutlin-3 depending on p53 status.* Cancer Biol. Ther. 13 (14), 1522-1528 (2012)

Applications

- 1. May be used for in vitro DEK mediated gene transcription / mRNA splicing regulation study for cancer cell's progress with "ProFectin" reagent based intracellular delivery of this protein.
- 2. May be used as specific protein substrate for kinase and ubiquitin (Sumo pathway) related enzyme functional screening assays.
- 3. May be used for DEK protein-protein interaction mapping.
- 4. As immunogen for specific antibody production.

Quality Control

Purity: > 80% by SDS-PAGE.

Recombinant Protein Sequence

MASMTGGQQMGRGHHHHHHENLYFQGEFSASAPAAEGEGTPTQPASEKEPEMPGPREESEEED EDDEEEEEEKEKSLIVEGKREKKKVERLTMQVSSLQREPFTIAQGKGQKLCEIERIHFFLSKK KTDELRNLHKLLYNRPGTVSSLKKNVGQFSGFPFEKGSVQYKKKEEMLKKFRNAMLKSICEVLD LERSGVNSELVKRILNFLMHPKPSGKPLPKSKKTCSKGSKKERNSSGMARKAKRTKCPEILSDE SSSDEDEKKNKEESSDDEDKESEEEPPKKTAKREKPKQKATSKSKKSVKSANVKKADSSTTKKN QNSSKKESESEDSSDDEPLIKKLKKPPTDEELKETIKKLLASANLEEVTMKQICKKVYENYPTY DLTERKDFIKTTVKELIS