

#### DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human DEK in direct ELISAs and Western blots.
<b>Source</b>	Monoclonal Mouse IgG <sub>2B</sub> Clone # 715524
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	Human embryonic kidney cell line HEK293EBNA-derived recombinant human DEK Ser2-Ser375 Accession # P35659
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

#### APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Western Blot</b>	0.5 µg/mL	See Below
<b>Immunohistochemistry</b>	5-15 µg/mL	See Below

#### DATA

**Western Blot**

**Detection of Human DEK by Western Blot.** Western blot shows lysates of Jurkat human acute T cell leukemia cell line, HeLa human cervical epithelial carcinoma cell line, HEK293 human embryonic kidney cell line, and OVCAR-3 human ovarian carcinoma cell line. Gels were loaded with 30 µg of cytoplasmic (Cyto) and 30 µg of nuclear extracts (Nuc). PVDF membrane was probed with 0.5 µg/mL of Mouse Anti-Human DEK Monoclonal Antibody (Catalog # MAB7020) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). A specific band was detected for DEK at approximately 50 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

**Immunohistochemistry**

**DEK in Human Cervical Cancer Tissue.** DEK was detected in immersion fixed paraffin-embedded sections of human cervical cancer tissue using Mouse Anti-Human DEK Monoclonal Antibody (Catalog # MAB7020) at 5 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Mouse HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS002) and counterstained with hematoxylin (blue). Specific staining was localized to nuclei. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

#### PREPARATION AND STORAGE

<b>Reconstitution</b>	Sterile PBS to a final concentration of 0.5 mg/mL.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>• 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>• 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>• 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

#### BACKGROUND

The DEK oncogene is an approximately 45 kDa phosphoprotein with pleiotropic activities. It is a chromatin remodeling factor, a transcriptional coactivator and corepressor, a component of RNA spliceosomes, and a promoter of DNA repair during apoptosis. DEK is upregulated in many cancers and promotes epithelial cell transformation. It functions as a proinflammatory factor when secreted by activated macrophages. It is an autoantigen in juvenile arthritis and lupus and a target of chromosomal translocation with the CAN gene in acute myelogenous leukemia. DEK contains one SAP domain (aa 149-183), one nuclear localization sequence (aa 205-221), and a DNA-binding C-terminal domain (aa 321-375). Within aa 292-375, human DEK shares 95% aa sequence identity with mouse and rat DEK.