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 myelogenous leukemia (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 Eif-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.

Immunofluorescence 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.
Application Notes

<table>
<thead>
<tr>
<th>Application</th>
<th>Routinely Tested</th>
<th>Tested During Development</th>
</tr>
</thead>
<tbody>
<tr>
<td>Western blot</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Immunofluorescence</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Suggested Companion Products

<table>
<thead>
<tr>
<th>Catalog Number</th>
<th>Name</th>
<th>Size</th>
<th>Clone</th>
</tr>
</thead>
<tbody>
<tr>
<td>611451</td>
<td>Jurkat Cell Lysate</td>
<td>500 µg</td>
<td>(none)</td>
</tr>
<tr>
<td>554002</td>
<td>HRP Goat Anti-Mouse Igs</td>
<td>1.0 ml</td>
<td>(none)</td>
</tr>
<tr>
<td>554001</td>
<td>FITC Goat Anti-Mouse Igs</td>
<td>0.5 mg</td>
<td>Polyclonal</td>
</tr>
</tbody>
</table>

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
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

