Technical Data Sheet

Purified Mouse Anti-Human DP103

Product Information

Material Number: 612152
Alternate Name: Gemin3; DEAD box Protein-103; Ddx20
Size: 50 µg
Concentration: 250 µg/ml
Clone: 2/DP103/Gemin3
Immunogen: Human DP103 aa. 667-783
Isotype: Mouse IgG2b
Reactivity: QC Testing: Human
Target MW: 103 kDa
Storage Buffer: Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium azide.

Description

DEAD box proteins, a family of putative RNA helicases, are characterized by eight conserved amino acid motifs that are arranged in a core region as found in the prototypical member of the family, eIF-4A. The family's name is derived from the amino acid sequence Asp-Glu-Ala-Asp (DEAD) that is located within the ATP hydrolysis motif. DEAD box proteins have been implicated in translation initiation and RNA splicing, degradation, and stability. The DEAD box protein, DP103, contains seven N-terminal helicase motifs characteristic of DEAD box proteins followed by an SMN interaction domain (SID). DP103 mRNA has been reported to be widely expressed, and DP103 protein is found in the nucleus and cytoplasm. SMN, the gene mutated in spinal muscular atrophy, forms a 20S nuclear complex that includes DP103, SIP1 (SMN-interacting protein 1), and snRNPs. DP103 also co-localizes with SMN and SIP1 to nuclear bodies called gems. In addition, DP103 interacts with the proximal repressor domain of steroidogenic factor-1, a nuclear receptor essential for development of the gonads, adrenal gland, and hypothalamic nuclei. Thus, DP103 may have roles in SMN complex modulation of RNA splicing and in transcriptional repression.

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.


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>Routine Tested</th>
<th>Not Recommended</th>
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<tbody>
<tr>
<td>Western blot</td>
<td>Routinely Tested</td>
<td></td>
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<tr>
<td>Immunofluorescence</td>
<td>Not Recommended</td>
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#### Recommended Assay Procedure:

**Western blot:** Please refer to [http://www.bdbiosciences.com/pharmingen/protocols/Western_Blotting.shtml](http://www.bdbiosciences.com/pharmingen/protocols/Western_Blotting.shtml)

### Suggested Companion Products

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<tr>
<th>Catalog Number</th>
<th>Name</th>
<th>Size</th>
<th>Clone</th>
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<tbody>
<tr>
<td>611451</td>
<td>Jurkat Cell Lysate</td>
<td>500 µg</td>
<td>(none)</td>
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<tr>
<td>554002</td>
<td>HRP Goat Anti-Mouse Ig</td>
<td>1.0 ml</td>
<td>(none)</td>
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### 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