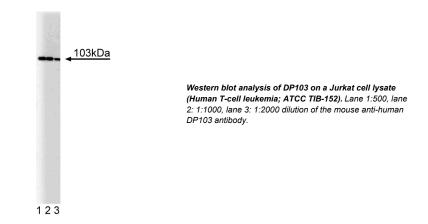
# Technical Data Sheet Purified Mouse Anti-Human DP103

612152
Gemin3; DEAD box Protein-103; Ddx20
50 µg
250 µg/ml
2/DP103/Gemin3
Human DP103 aa. 667-783
Mouse IgG2b
QC Testing: Human
103 kDa
Aqueous buffered solution containing BSA, glycerol, and $\leq 0.09\%$ 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.

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## **Application Notes**

Application

P	Appication						
	Western blot	Routinely Tested					
	Immunofluorescence	Not Recommended					

**Recommended Assay Procedure:** 

Western blot: Please refer to http://www.bdbiosciences.com/pharmingen/protocols/Western\_Blotting.shtml

#### **Suggested Companion Products**

Catalog Number	Name	Size	Clone
611451	Jurkat Cell Lysate	500 μg	(none)
554002	HRP Goat Anti-Mouse Ig	1.0 ml	(none)

#### **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

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Grundhoff AT, Kremmer E, Tureci O, et al. Characterization of DP103, a novel DEAD box protein that binds to the Epstein-Barr virus nuclear proteins EBNA2 and EBNA3C. J Biol Chem. 1999; 274(27):19136-19144.(Biology)

Meister G, Buhler D, Laggerbauer B, Zobawa M, Lottspeich F, Fischer U. Characterization of a nuclear 20S complex containing the survival of motor neurons (SMN) protein and a specific subset of spliceosomal Sm proteins. *Hum Mol Genet.* 2000; 9(13):1977-1986.(Biology)

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