

Anti-Gemin3 Antibody

Catalog # AP95796

Product Information

Application	WB, FC, IF/IC
Primary Accession	Q9UHI6
Reactivity	Human, Rat
Host	Mouse
Clonality	Monoclonal
Calculated MW	92241

Additional Information

Gene ID	11218
Other Names	DP103; GEMIN3; Probable ATP-dependent RNA helicase DDX20; Component of gems 3; DEAD box protein 20; DEAD box protein DP 103; Gemin-3
Target/Specificity	Recombinant fusion protein of human Gemin3 expressed in E. Coli
Dilution	WB~~WB (1/500 - 1/1000) FC~~FC (1/100 - 1/200) IF/IC~~N/A
Format	Mouse IgG1. Liquid in PBS, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

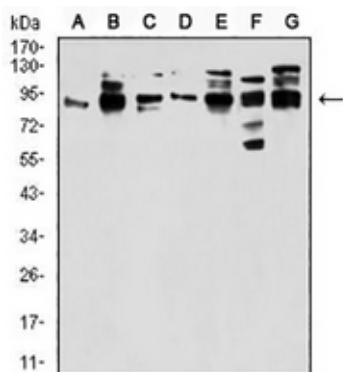
Name	DDX20
Synonyms	DP103, GEMIN3
Function	The SMN complex catalyzes the assembly of small nuclear ribonucleoproteins (snRNPs), the building blocks of the spliceosome, and thereby plays an important role in the splicing of cellular pre- mRNAs. Most spliceosomal snRNPs contain a common set of Sm proteins SNRNPB, SNRPD1, SNRPD2, SNRPD3, SNRPE, SNRPF and SNRPG that assemble in a heptameric protein ring on the Sm site of the small nuclear RNA to form the core snRNP (Sm core). In the cytosol, the Sm proteins SNRPD1, SNRPD2, SNRPE, SNRPF and SNRPG are trapped in an inactive 6S pICln-Sm complex by the chaperone CLNS1A that controls the assembly of the core snRNP. To assemble core snRNPs, the SMN complex accepts the trapped 5Sm proteins from CLNS1A forming an intermediate. Binding of snRNA inside 5Sm triggers eviction of the SMN complex, thereby allowing binding of SNRPD3 and SNRNPB to complete assembly of the core snRNP. May also play a role in the metabolism of small nucleolar ribonucleoprotein (snoRNPs).

Cellular Location

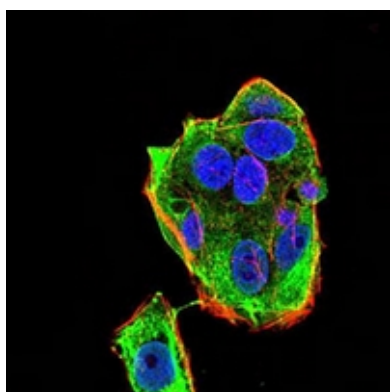
Cytoplasm. Nucleus, gem Note=Localized in subnuclear structures next to coiled bodies, called Gemini of Cajal bodies (Gems).

Tissue Location

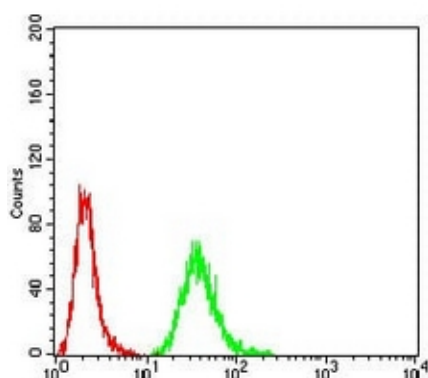
Ubiquitous.

Images

Western blot analysis of Gemin3 expression in Jurkat (A), HeLa (B), NTERA2 (C), HL7702 (D), K562 (E), C6 (F) whole cell lysates. (Predicted band size: 92 kD; Observed band size: 92 kD)



Immunofluorescent analysis of Gemin3 staining in HeLa cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with an AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).



Flow cytometric analysis of HeLa cells using Anti-Gemin3 Antibody (green) and negative control (red).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.