

Recombinant Anti-Gemin3 Rabbit mAb

Catalog # AP95163

Product Information

Application	WB, IHC, FC, IF/IC
Primary Accession	Q9UHI6
Reactivity	Human, Mouse
Host	Rabbit
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	KLH-conjugated synthetic peptide encompassing a sequence within human Gemin3 protein. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) IHC~~1:100~500 FC~~1:10~50 IF/IC~~N/A
Format	Liquid in PBS, pH 7.3, 50% glycerol, 0.05% BSA, and 0.05% Proclin300.
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).

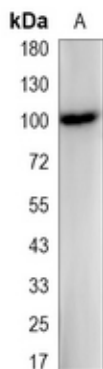
Cellular Location

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

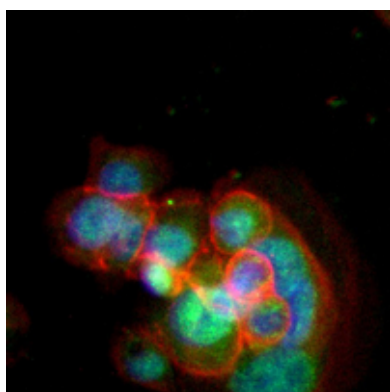
Tissue Location

Ubiquitous.

Images



Western blot analysis of Gemin3 expression in HEK293T (A) whole cell lysates. (Predicted band size: 92 kD; Observed band size: 100 kD)



Immunofluorescent analysis of Gemin3 staining in HEK293T 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).

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