

Gemin 3 Recombinant Rabbit mAb

Catalog # AP99556

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q9UHI6
Other Accession	Q9UHI6
Reactivity	Rat, Human, Mouse
Host	Rabbit
Clonality	Recombinant
Calculated MW	92241
Physical State	Liquid
Immunogen	A synthesized peptide derived from human DDX20
Epitope Specificity	1-53/824
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	10mM phosphate buffered saline(pH 7.4) with 150mM sodium chloride, 0.05% BSA, 0.02% Proclin300 and 50% glycerol.
SIMILARITY	Belongs to the DEAD box helicase family. DDX20 subfamily. Contains 1 helicase ATP-binding domain. Contains 1 helicase C-terminal domain.
SUBUNIT	Part of the core SMN complex that contains SMN1, GEMIN2/SIP1, DDX20/GEMIN3, GEMIN4, GEMIN5, GEMIN6, GEMIN7, GEMIN8 and STRAP/UNRIP. Interacts directly with SMN1 and with several spliceosomal snRNP core Sm proteins, including SNUPN, SNRPB, SNRPD2 and SNRPD3. Interacts with PPP4R2. Interacts with EBV EBNA2 and EBNA3C. Interacts with FOXL2. [SUBCELLULAR LOCATION] Cytoplasm. Nucleus, gem. Note=Localized in subnuclear structures next to coiled bodies, called Gemini of Cajal bodies (Gems).
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	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 SNRPB, 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).

Additional Information

Gene ID	11218
Other Names	DP103; GEMIN3; DDX20_HUMAN; DDX20; Component of gems 3; DEAD box protein 20; DEAD box protein DP 103; Gemin-3; 3.6.1.15; 3.6.4.13; DDX20_MOUSE; Regulator of steroidogenic factor 1 (ROSF-1); DEAD-box helicase 20; DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 20, 103kD; DEAD (Asp-Glu-Ala-Asp) box polypeptide 20; Probable ATP-dependent RNA helicase

DDX20

Dilution	IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,Flow-Cyt=1:50-100
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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 or Cajal bodies (Gems).
Tissue Location	Ubiquitous.

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