

DDX20 Antibody
Purified Mouse Monoclonal Antibody
Catalog # AO2157a**Specification****DDX20 Antibody - Product Information**

Application	WB, FC, ICC, E
Primary Accession	Q9UHI6
Reactivity	Human, Rat
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	92.2kDa KDa

Description

DEAD box proteins, characterized by the conserved motif Asp-Glu-Ala-Asp (DEAD), are putative RNA helicases. They are implicated in a number of cellular processes involving alteration of RNA secondary structure such as translation initiation, nuclear and mitochondrial splicing, and ribosome and spliceosome assembly. Based on their distribution patterns, some members of this family are believed to be involved in embryogenesis, spermatogenesis, and cellular growth and division. This gene encodes a DEAD box protein, which has an ATPase activity and is a component of the survival of motor neurons (SMN) complex. This protein interacts directly with SMN, the spinal muscular atrophy gene product, and may play a catalytic role in the function of the SMN complex on RNPs.

Immunogen

Purified recombinant fragment of human DDX20 (AA: 725-824) expressed in E. Coli.

Formulation

Purified antibody in PBS with 0.05% sodium azide

DDX20 Antibody - Additional Information

Gene ID 11218

Other Names

Probable ATP-dependent RNA helicase DDX20, 3.6.4.13, Component of gems 3, DEAD box protein 20, DEAD box protein DP 103, Gemin-3, DDX20, DP103, GEMIN3

Dilution

WB~~1/500 - 1/2000

FC~~1/200 - 1/400

ICC~~N/A

E~~1/10000

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

DDX20 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

DDX20 Antibody - 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 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). 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 SNRPB 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.

DDX20 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)