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DDX20 Antibody (C-term) Blocking Peptide

Synthetic peptide
Catalog # BP14870b

Specification

DDX20 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession Q9UHI6

DDX20 Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 11218

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

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

DDX20 Antibody (C-term) Blocking Peptide - 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 of Cajal bodies (Gems).

Tissue Location
Ubiquitous.

DDX20 Antibody (C-term) Blocking Peptide - Protocols

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

- Blocking Peptides

DDX20 Antibody (C-term) Blocking Peptide - Images

DDX20 Antibody (C-term) Blocking Peptide - Background

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

DDX20 Antibody (C-term) Blocking Peptide - References

Todd, A.G., et al. J. Mol. Biol. 401(5):681-689(2010)Sun, X., et al. Cell Stress Chaperones 15(5):567-582(2010)Wilker, E.H., et al. Environ. Health Perspect. 118(7):943-948(2010)Boni, V., et al. Pharmacogenomics J. (2010) In press :Ye, Y., et al. Cancer Prev Res (Phila) 1(6):460-469(2008)