

**GEMIN4 Blocking Peptide (N-term)**

Synthetic peptide

Catalog # BP20185a

**Specification**

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**GEMIN4 Blocking Peptide (N-term) - Product Information**

Primary Accession

[P57678](#)

Other Accession

[NP\\_056536.2](#)**GEMIN4 Blocking Peptide (N-term) - Additional Information****Gene ID** 50628**Other Names**

Gem-associated protein 4, Gemin-4, Component of gems 4, p97, GEMIN4

**Target/Specificity**

The synthetic peptide sequence is selected from aa 288-301 of HUMAN GEMIN4

**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.

**GEMIN4 Blocking Peptide (N-term) - Protein Information****Name** GEMIN4**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.

**Cellular Location**

Cytoplasm. Nucleus. Nucleus, nucleolus. Nucleus, gem. Note=Localized in subnuclear structures next to coiled bodies, called gems, which are highly enriched in spliceosomal snRNPs and in the

nucleolus

### **GEMIN4 Blocking Peptide (N-term) - Protocols**

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

- [Blocking Peptides](#)

### **GEMIN4 Blocking Peptide (N-term) - Images**

### **GEMIN4 Blocking Peptide (N-term) - Background**

The product of this gene is part of a large complex localized to the cytoplasm, nucleoli, and to discrete nuclear bodies called Gemini bodies (gems). The complex functions in spliceosomal snRNP assembly in the cytoplasm, and regenerates spliceosomes required for pre-mRNA splicing in the nucleus. The encoded protein directly interacts with a DEAD box protein and several spliceosome core proteins. Alternatively spliced transcript variants have been described, but their biological validity has not been determined.

### **GEMIN4 Blocking Peptide (N-term) - References**

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