

# Rabbit Anti-Gemin 7 antibody

# SL13330R

Product Name:	Gemin 7
Chinese Name:	脊髓性肌萎缩症蛋白Gemin7抗体
Alias:	SIP3; Gemin-7; GEMI7 HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Chicken, Dog, Cow, Horse,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800Flow-Cyt=1µg/TestICC=1:100-
	500IF=1:100-500 (Paraffin sections need antigen repair)
	not yet tested in other applications.
	optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	15kDa
Cellular localization:	The nucleus
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Gemin 7:21-120/131
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. 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.
PubMed:	<u>PubMed</u>
Product Detail:	Gemin7 is a 131 amino acid protein encoded by the mouse gene Gemin7. Gemin7, along with Gemin6, is a significant component of the the large multiprotein human SMN complex. The SMN complex functions as an assembly machine for small nuclear ribonucleoproteins (snRNPs)-the major components of the spliceosome. The survival of motor neurons (SMN) protein, a product of the disease gene of the common neurodegenerative disease, spinal muscular atrophy, is also part of the SMN complex. Although Gemin6 and Gemin7 have no significant sequence similarity with Sm proteins,

both adopt canonical Sm folds. Moreover, Gemin6 and Gemin7 exist as a heterodimer, and interact with each other via an interface similar to that which mediates interactions among the Sm proteins. The Gemin6/Gemin7 complex binds to Sm proteins and might help organize Sm proteins for formation of Sm rings on snRNA targets.

### **Function:**

The protein encoded by this gene is a component of the core SMN complex, which is required for pre-mRNA splicing in the nucleus. The encoded protein is found in the nucleoplasm, in nuclear "gems" (Gemini of Cajal bodies) and in the cytoplasm.

#### **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 GEMIN6, SNRPB, SNRPD2, SNRPD3 and SNRPE.

#### **Subcellular Location:**

Nucleus, nucleoplasm. Nucleus, gem. Cytoplasm. Note=Found both in the nucleoplasm and in nuclear bodies called gems (Gemini of Cajal bodies) that are often in proximity to Cajal (coiled) bodies. Also found in the cytoplasm.

## Similarity:

Belongs to the gemin-7 family.

SWISS: O9H840

Gene ID:

79760

#### Database links:

Entrez Gene: 79760Human

Entrez Gene: 69731Mouse

Omim: 607419Human

SwissProt: Q9H840Human

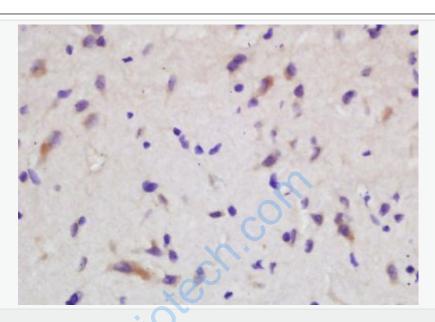
SwissProt: Q9CWY4Mouse

<u>Unigene: 466919</u>Human

Unigene: 24540 Mouse

# **Important Note:**

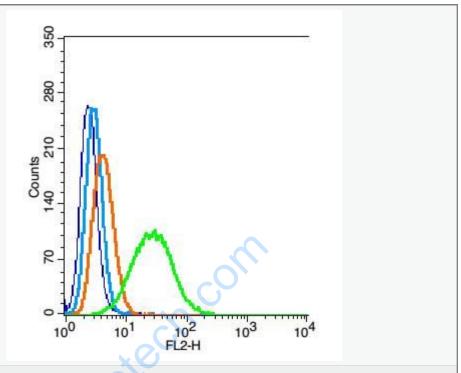
This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.



## Picture:

Tissue/cell: rat brain tissue; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer ( 0.01M, pH 6.0 ), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-Gemin 7 Polyclonal Antibody, Unconjugated(SL13330R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Blank control: Hela(blue), the cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with ice-cold 90% methanol for 30 min on ice..

Isotype Control Antibody: Rabbit IgG(orange); Secondary Antibody: Goat anti-

Primary Antibody Dilution: 1µg in 100 µL1X PBS containing 0.5% BSA(green).

rabbit IgG-FITC(white blue), Dilution: 1:100 in 1 X PBS containing 0.5% BSA;