



## Rabbit Anti-SEMCAP3 antibody

SL9191R

<b>Product Name:</b>	SEMCAP3
<b>Chinese Name:</b>	SEMCAP3蛋白抗体
<b>Alias:</b>	Ligand of Numb protein X 3; likely ortholog of mouse semaF cytoplasmic domain associated protein 3; LNX3; PDZ domain containing ring finger 3; Protein SEMACAP3; SEMACAP3; Semaphorin cytoplasmic domain associated protein; PZRN3 HUMAN.
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,Mouse,Rat,Cow,Horse,Rabbit,Sheep,
<b>Applications:</b>	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:50-200 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight:</b>	120kDa
<b>Cellular localization:</b>	cytoplasmic
<b>Form:</b>	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
<b>immunogen:</b>	KLH conjugated synthetic peptide derived from human SEMCAP3/LNX3:951-1066/1066
<b>Lsotype:</b>	IgG
<b>Purification:</b>	affinity purified by Protein A
<b>Storage Buffer:</b>	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
<b>Storage:</b>	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.
<b>PubMed:</b>	<a href="#">PubMed</a>
<b>Product Detail:</b>	PDZRN3 contains a RING-finger motif in its N-terminal region, two PDZ domains in its central region and a consensus-binding motif for PDZ domains at its C-terminus. It was identified in silico as a homolog of the protein known as LNX1 or SEMCAP1,

which possesses ubiquitin ligase activity and binds the membrane protein Semaphorin 4C. However, PDZRN3 itself has not previously been characterized. We have now evaluated the properties and functions of PDZRN3. The PDZRN3 gene was shown to be expressed in various human tissues including the heart, skeletal muscle and liver and its expression in mouse skeletal muscle was developmentally regulated. Both the differentiation of C2C12 mouse skeletal myoblasts into myotubes and injury-induced muscle regeneration in vivo were found to be accompanied by up-regulation of PDZRN3. The differentiation-associated increase in the expression of PDZRN3 in C2C12 cells follows that of myogenin and precedes that of myosin heavy chain. Depletion of PDZRN3 by RNA interference inhibited the formation of myotubes as well as the associated up-regulation of myosin heavy chain in C2C12 cells. Our data suggest that PDZRN3 plays an essential role in the differentiation of myoblasts into myotubes by acting either downstream or independently of myogenin.

**Function:**

E3 ubiquitin-protein ligase. Plays an important role in regulating the surface level of MUSK on myotubes. Mediates the ubiquitination of MUSK, promoting its endocytosis and lysosomal degradation. Might contribute to terminal myogenic differentiation (By similarity).

**Subunit:**

Interacts with NLGN1 and EFNB2 (By similarity). Interacts with UBE2D2 and with MUSK via the first PDZ domain (By similarity).

**Tissue Specificity:**

SEMCAP3 is widely expressed at high levels, and is thought to be involved in protein/zinc ion binding.

**Post-translational modifications:**

Auto-ubiquitinated (By similarity).

**Similarity:**

Contains 2 PDZ (DHR) domains.  
Contains 1 RING-type zinc finger.  
Contains 1 TRAF-type zinc finger.

**SWISS:**

Q9UPQ7

**Gene ID:**

23024

**Database links:**

[Entrez Gene: 23024](#)Human

[Entrez Gene: 55983](#)Mouse

[Entrez Gene: 312607](#)Rat

[Olim: 609729](#)Human

[SwissProt: Q9UPQ7](#)Human

[SwissProt: Q69ZS0](#)Mouse

[SwissProt: P68907](#)Rat

**Important Note:**

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

[www.sunlongbiotech.com](http://www.sunlongbiotech.com)