

# **Rabbit Anti-CNN2 antibody**

## SL9475R

<b>Product Name:</b>	CNN2
Chinese Name:	钙Binding proteinCalponin 2抗体
Alias:	Calponin 2; smooth muscle; Calponin H2; Calponin H2, smooth muscle; Calponin-2; Cnn2; CNN2 HUMAN; Neutral calponin.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Dog, Pig, Cow, Sheep,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=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:	34kDa
Cellular localization:	cytoplasmicExtracellular matrixSecretory protein
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human CNN2:101-200/309
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:	Calponin regulates smooth muscle cell contraction and is a marker of smooth muscle cell differentiation. Calponin, an Actin- and Tropomyosin-binding protein, is characterized as an inhibitory factor of smooth-muscle actomyosin activity. Calponin is implicated in the regulation of smooth muscle contraction through its interaction with F-Actin and inhibition of the Actin-activated MgATPase activity of phosphorylated myosin. Both properties are lost following phosphorylation (primarily at Serine 175) by

protein kinase C or calmodulin-dependent protein kinase II. The three forms of Calponin, Calponin 1 (basic Calponin), Calponin 2 (neutral Calponin) and Calponin 3 (acidic Calponin) are found in smooth muscle tissue. Additionally, Calponin 2 is found in heart muscle tissue and Calponin 3 is found in the brain.

## **Function:**

Thin filament-associated protein that is implicated in the regulation and modulation of smooth muscle contraction. It is capable of binding to actin, calmodulin, troponin C andtropomyosin. The interaction of calponin with actin inhibits the actomyosin Mg-ATPase activity.

## Tissue Specificity:

Heart and smooth muscle.

## Similarity:

Belongs to the calponin family.

Contains 3 calponin-like repeats.

Contains 1 CH (calponin-homology) domain.

## **SWISS:**

Q99439

#### Gene ID:

1265

#### Database links:

Entrez Gene: 1265Human

Omim: 602373Human

SwissProt: Q99439Human

Unigene: 651512Human

## **Important Note:**

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