

# Rabbit Anti-AKAP12 antibody

# SL1381R

Product Name:	AKAP12
Chinese Name:	丝氨酸抑制蛋白激酶C底物抗体
Alias:	A kinase (PRKA) anchor protein (gravin) 12; A kinase Anchor Protein 12; A kinase anchor protein 250kDa; AKAP 12; AKAP 250; AKAP250; DKFZp686M0430; DKFZp686O0331; Gercelin; Gravin; Kinase scaffold protein gravin; Myasthenia gravis autoantigen gravin; Srcs5; SSeCKS; Tsga12.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Dog,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800Flow-Cyt=1µg/TestIF=1:200-800 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	191kDa
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human AKAP12:701-900/1684
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:	The A-kinase anchor proteins (AKAPs) are a group of structurally diverse proteins, which have the common function of binding to the regulatory subunit of protein kinase A (PKA) and confining the holoenzyme to discrete locations within the cell. This gene encodes a member of the AKAP family. The encoded protein is expressed in endothelial

cells, cultured fibroblasts, and osteosarcoma cells. It associates with protein kinases A and C and phosphatase, and serves as a scaffold protein in signal transduction. This protein and RII PKA colocalize at the cell periphery. This protein is a cell growth-related protein. Antibodies to this protein can be produced by patients with myasthenia gravis. Alternative splicing of this gene results in two transcript variants encoding different isoforms. [provided by RefSeq, Jul 2008]

#### Function:

Anchoring protein that mediates the subcellular compartmentation of protein kinase A (PKA) and protein kinase C (PKC).

# **Subcellular Location:**

Cytoplasm

## Tissue Specificity:

Expressed in endothelial cells, cultured fibroblasts and osteosarcoma, but not in platelets, leukocytes, monocytic cell lines or peripherical blood cells.

### Post-translational modifications:

Phosphorylated upon DNA damage, probably by ATM or ATR.

#### Similarity:

Contains 3 AKAP domains.

#### **SWISS:**

O02952

#### Gene ID:

9590

#### Database links:

Entrez Gene: 9590Human

Omim: 604698Human

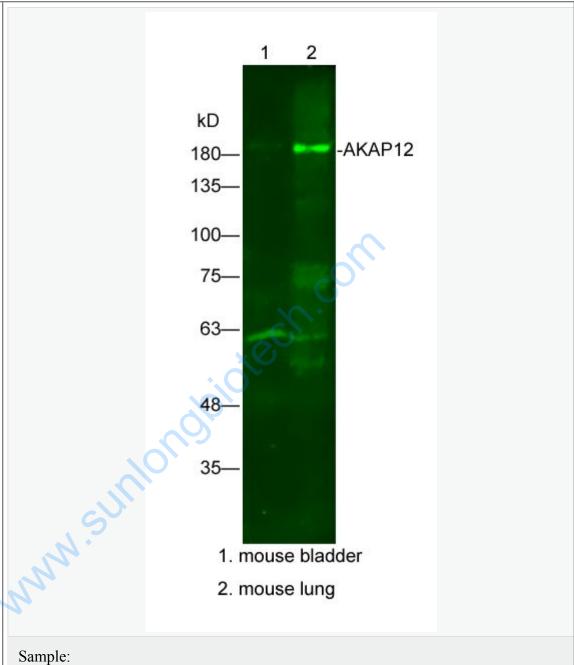
SwissProt: Q02952Human

<u>Unigene: 197081</u>Human

Unigene: 371240Human

#### **Important Note:**

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



Picture:

Lane1: mouse bladder Lysate at 25 ug

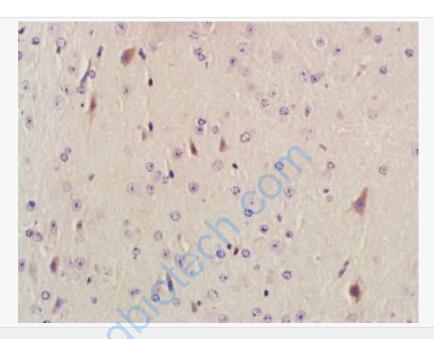
Lane2: mouse lung Lysate at 25 ug

Primary: Anti-AKAP12(SL1381R) at 1/300 dilution

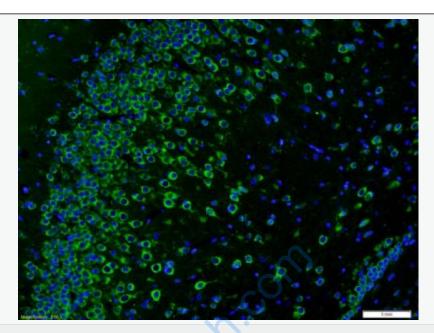
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 191kD

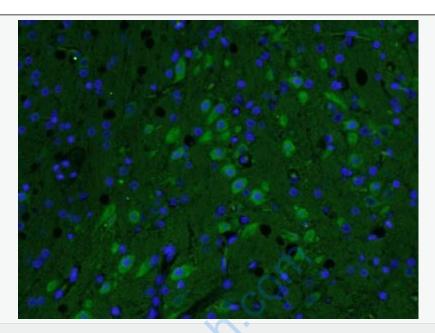
Observed band size: 191kD



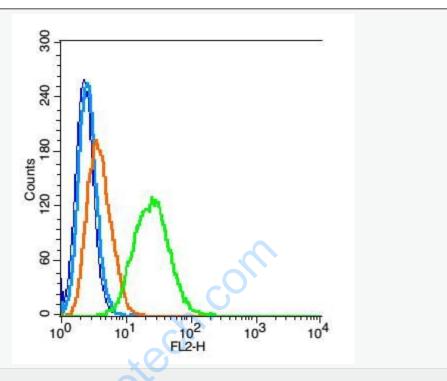
Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (AKAP12) Polyclonal Antibody, Unconjugated (SL1381R) at 1:400 overnight at 4°C, followed by a conjugated secondary antibody (sp-0023) for 20 minutes and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (AKAP12) Polyclonal Antibody, Unconjugated (SL1381R) at 1:400 overnight at 4°C, followed by a conjugated secondary antibody (SL1381R) for 90 minutes, and DAPI for nuclei staining.



Paraformaldehyde-fixed, paraffin embedded (Rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (AKAP12) Polyclonal Antibody, Unconjugated (SL1381R) at 1:400 overnight at 4°C, followed by a conjugated Goat Anti-Rabbit IgG antibody (SL1381R) for 90 minutes, and DAPI for nuclei staining.



Blank control: RSC 96 (blue).

Primary Antibody:Rabbit Anti-AKAP12 antibody(SL1381R), Dilution: 1 $\mu$ g in 100  $\mu$ L 1X PBS containing 0.5% BSA;

Isotype Control Antibody: Rabbit IgG(orange) ,used under the same conditions ); Secondary Antibody: Goat anti-rabbit IgG-PE(white blue), Dilution: 1:200 in 1 X PBS containing 0.5% BSA.

#### Protocol

The cells were fixed with 2% paraformaldehyde (10 min), then permeabilized with 90% ice-cold methanol for 30 min on ice. Antibody (SL1381R) were incubated for 30 min on the ice, followed by 1 X PBS containing 0.5% BSA + 1 0% goat serum (15 min) to block non-specific protein-protein interactions. Then the Goat Antirabbit IgG/PE antibody was added into the blocking buffer mentioned above to react with the primary antibody of bs-1381R at 1/200 dilution for 30 min on ice.

Acquisition of 20,000 events was performed.	
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