



## Rabbit Anti-Secretogranin V antibody

SL10762R

<b>Product Name:</b>	Secretogranin V
<b>Chinese Name:</b>	神经内分泌颗粒蛋白5抗体
<b>Alias:</b>	7B2; 7B2 protein; APPG; Neuroendocrine protein 7B2; P7B2; Pituitary polypeptide; Pituitary polypeptide; Prohormone convertase chaperone; SCG 5; SCG5; Secretogranin 5; Secretogranin V 7B2 protein; Secretogranin5; SecretograninV; Secretory granule endocrine protein I; Secretory granule endocrine protein I; Secretory granule neuroendocrine protein 1 7B2 protein; Secretory granule neuroendocrine protein 1; Sg V; SGNE 1; SGNE1; SgV; 7B2 HUMAN.
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,Mouse,Rat,Dog,Pig,Cow,Horse,Rabbit,Sheep,
<b>Applications:</b>	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.
<b>Molecular weight:</b>	17/21kDa
<b>Cellular localization:</b>	Secretory protein
<b>Form:</b>	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
<b>immunogen:</b>	KLH conjugated synthetic peptide derived from human PHF21A:1-100/212
<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>	Sg V is a 212 amino acid protein that is secreted by endocrine and neuroendocrine secretory granules and belongs to the 7B2 family. Existing as two alternatively spliced

isoforms, Sg V interacts with PC2 and, via this interaction, functions as a molecular chaperone for PC2, effectively preventing its premature activation in regulated secretory pathways. More specifically, Sg V binds to PC2 and facilitates its transport from the endoplasmic reticulum to secretory compartments, thus allowing PC2 to be cleaved and activated during the correct phase of the regulated secretory pathway. Sg V is subject to post-translational sulfation on specific tyrosine residues and is underexpressed in medulloblastomas, suggesting a role in tumor suppression. The gene encoding Sg V maps to human chromosome 15, which houses over 700 genes and comprises nearly 3% of the human genome.

**Function:**

Secretogranin V may have intracellular functions other than PC2 maturation in certain cells, although some recent work shows a discordancy between mRNA expression and enzymic activity. The mechanism for PC2 maturation appears to involve pro-Secretogranin V binding to inactive pro-PC2 via its polyproline motif (116 PPNPCP 121) in the endoplasmic reticulum and chaperoning pro-PC2 to a later secretory pathway compartment where maturation of PC2 proceeds once pro-Secretogranin V is proteolytically processed by a furin-like convertase into a 21kDa fragment and a C-terminal peptide. It is the C-terminal peptide that potently inhibits maturation of pro-PC2 until the complex is subjected to a decreasing pH gradient along the secretory pathway. It seems likely that mature PC2 then cleaves the CT peptide at its internal lys-lys site. Secretogranin V knockout mice develop a severe Cushings-like phenotype and exhibit multiple metabolic and hormonal abnormalities, indicating that Secretogranin V is required for activation of PC2 in vivo. Conversely, PC2-null mice appear to be viable.

**Subunit:**

Interacts with PCSK2/PC2 early in the secretory pathway. Dissociation occurs at later stages.

**Subcellular Location:**

Secreted. Note=Neuroendocrine and endocrine secretory granules.

**Tissue Specificity:**

Highly expressed in brain. Expressed at much lower level in other tissues.

**Post-translational modifications:**

Proteolytically cleaved in the Golgi by a furin-like convertase to generate bioactive peptides.

Sulfated on tyrosine residues.

**Similarity:**

Belongs to the 7B2 family.

**SWISS:**

P05408

**Gene ID:**  
6447

**Database links:**

[Entrez Gene: 6447](#) Human

[Entrez Gene: 20394](#) Mouse

[Entrez Gene: 397110](#) Pig

[Entrez Gene: 25719](#) Rat

[Omim: 173120](#) Human

[SwissProt: P05408](#) Human

[SwissProt: P12961](#) Mouse

[SwissProt: P01165](#) Pig

[SwissProt: P27682](#) Rat

[Unigene: 156540](#) Human

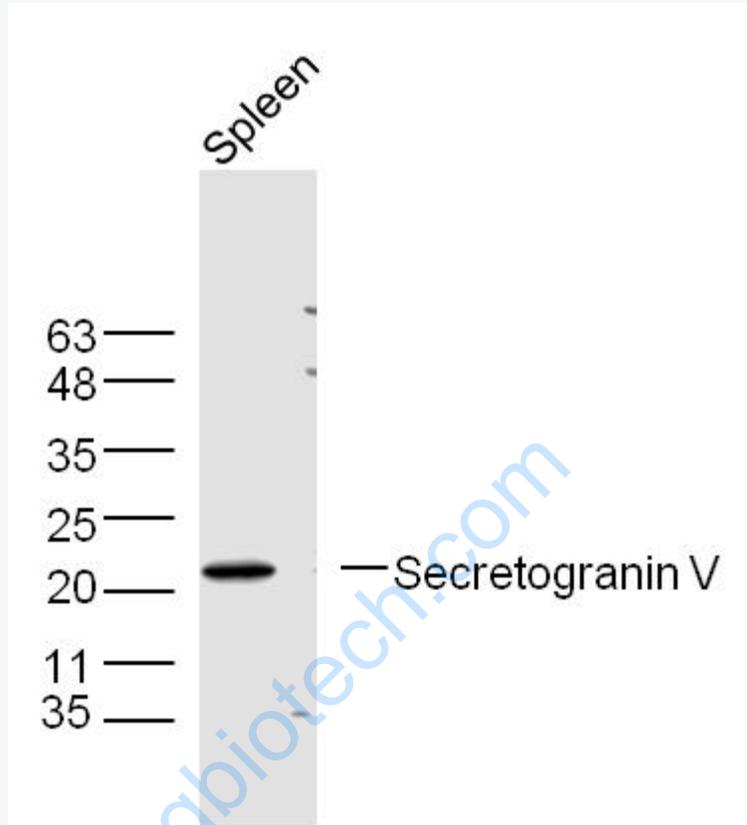
[Unigene: 4836](#) Mouse

[Unigene: 6173](#) Rat

**Important Note:**

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

Picture:



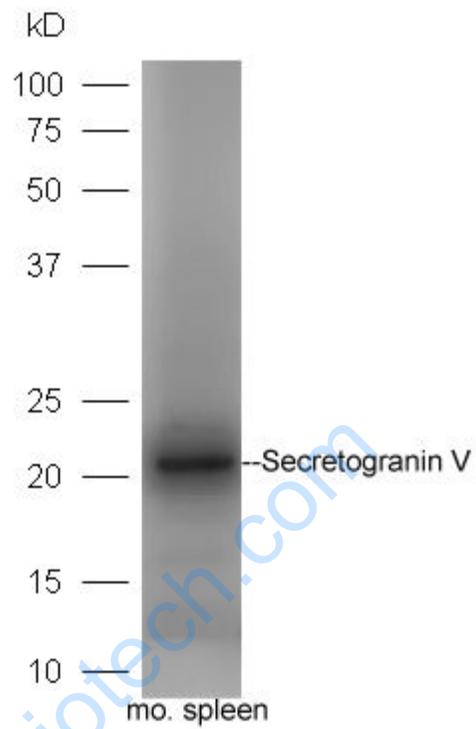
Sample: Spleen (Mouse) Lysate at 40 ug

Primary: Anti-Secretogranin V(SL10762R) at 1/300 dilution

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

Predicted band size: 17/21 kD

Observed band size: 21 kD



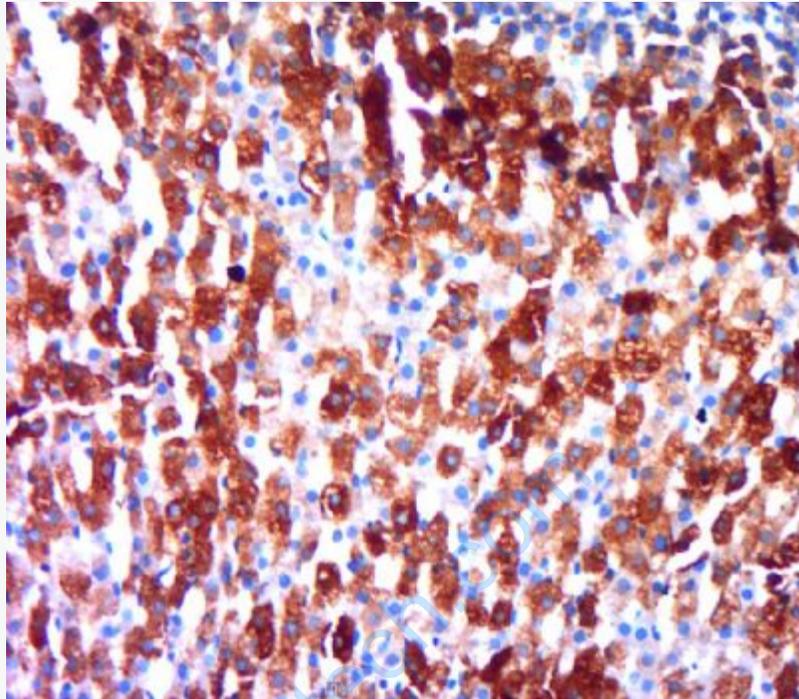
Protein: spleen(mouse) lysate at 40ug;

Primary: rabbit Anti-Secretogranin V (SL10762R) at 1:300;

Secondary: HRP conjugated Goat-Anti-rabbit IgG(SL10762R) at 1: 5000;

Predicted band size:17/21 kD

Observed band size:21 kD



Paraformaldehyde-fixed, paraffin embedded (Rat adrenal gland); 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 (Secretogranin V) Polyclonal Antibody, Unconjugated (SL10762R)t 1:400 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.