



## Rabbit Anti-SREBP2 antibody

SL2536R

<b>Product Name:</b>	SREBP2
<b>Chinese Name:</b>	胆固醇调节元件Binding protein2抗体
<b>Alias:</b>	Sterol Regulatory Element Binding Protein-2; MGC124823; Srebf2_retired; SREBP-2; SREBP2; SREBP-2; SRBP2_HUMAN; Sterol regulatory element-binding protein 2; SREBP-2; Class D basic helix-loop-helix protein 2; bHLHd2; Sterol regulatory element-binding transcription factor 2; Processed sterol regulatory element-binding protein 2.
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,Mouse,Rat,Pig,Horse,
<b>Applications:</b>	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=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>	126kDa
<b>Cellular localization:</b>	The nucleuscytoplasmic
<b>Form:</b>	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
<b>immunogen:</b>	KLH conjugated synthetic peptide derived from human SREBP-2:951-1141/1141
<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>	Under basal conditions SREBP is bound to ER membranes as a glycosylated precursor protein. Upon cholesterol depletion, the protein is cleaved to its active forms (50-68 kDa) and translocated into the nucleus to stimulate transcription of genes involved in the uptake and synthesis of cholesterol. ab30682 detects both precursor and active forms of

SREBP2 in tissues and cells such as liver, brown fat, testis, HepG2 cells, and human fibroblast. The apparent molecular weight on SDS-PAGE may be higher than the calculated molecular weight (about 126 kDa) due to glycosylation of the protein.

**Function:**

Transcriptional activator required for lipid homeostasis. Regulates transcription of the LDL receptor gene as well as the cholesterol and to a lesser degree the fatty acid synthesis pathway (By similarity). Binds the sterol regulatory element 1 (SRE-1) (5'-ATCACCCAC-3') found in the flanking region of the LDLR and HMG-CoA synthase genes.

**Subunit:**

Forms a tight complex with SCAP in the ER membrane. Efficient DNA binding of the soluble transcription factor fragment requires dimerization with another bHLH protein. Interacts with LMNA. Component of SCAP/SREBP complex composed of SREBF2, SCAP and RNF139; the complex hampers the interaction between SCAP and SEC24B, thereby reducing SREBF2 proteolytic processing. Interacts (via C-terminus domain) with RNF139.

**Subcellular Location:**

Endoplasmic reticulum membrane; Multi-pass membrane protein. Golgi apparatus membrane; Multi-pass membrane protein. Cytoplasmic vesicle, COPII-coated vesicle membrane; Multi-pass membrane protein. Note=Moves from the endoplasmic reticulum to the Golgi in the absence of sterols.

Processed sterol regulatory element-binding protein 2: Nucleus.

**Tissue Specificity:**

Ubiquitously expressed in adult and fetal tissues.

**Post-translational modifications:**

At low cholesterol the SCAP/SREBP complex is recruited into COPII vesicles for export from the ER. In the Golgi complex SREBPs are cleaved sequentially by site-1 and site-2 protease. The first cleavage by site-1 protease occurs within the luminal loop, the second cleavage by site-2 protease occurs within the first transmembrane domain and releases the transcription factor from the Golgi membrane. Apoptosis triggers cleavage by the cysteine proteases caspase-3 and caspase-7.

Phosphorylated by AMPK, leading to suppress protein processing and nuclear translocation, and repress target gene expression (By similarity).

**Similarity:**

Belongs to the SREBP family.

Contains 1 bHLH (basic helix-loop-helix) domain.

**SWISS:**

Q12772

**Gene ID:**  
6721

**Database links:**

[Entrez Gene: 395304](#)Chicken

[Entrez Gene: 6721](#)Human

[Entrez Gene: 20788](#)Mouse

[Entrez Gene: 396675](#)Pig

[Entrez Gene: 300095](#)Rat

[Entrez Gene: 443980](#)Xenopus laevis

[Oimim: 600481](#)Human

[SwissProt: Q60429](#)Chinese Hamster

[SwissProt: Q12772](#)Human

[SwissProt: Q3U1N2](#)Mouse

[SwissProt: Q3T115](#)Rat

[SwissProt: Q6GQ26](#)Xenopus laevis

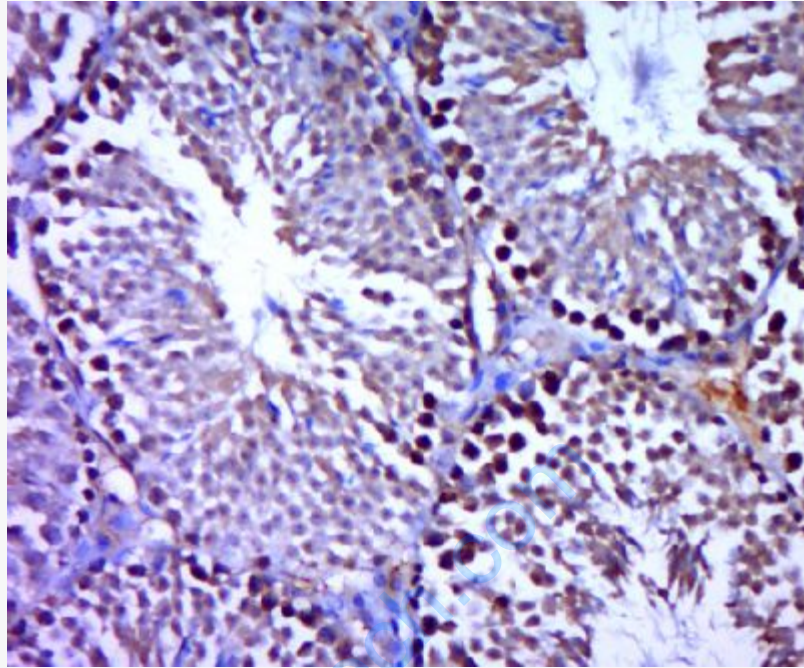
[Unigene: 443258](#)Human

[Unigene: 38016](#)Mouse

[Unigene: 41063](#)Rat

**Important Note:**

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



**Picture:**

Paraformaldehyde-fixed, paraffin embedded (mouse testis tissue); 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 (SREBP2) Polyclonal Antibody, Unconjugated (SL2536R) at 1:400 overnight at 4°C, followed by a conjugated secondary (sp-0024) for 20 minutes and DAB staining.