10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

SREBP-2 Recombinant Rabbit mAb

Catalog # AP100304

Product Information

Application	WB, IHC-P, IHC-F, IF, IP, E
Primary Accession	Q12772
Other Accession	Q12772
Reactivity	Rat, Human
Host	Rabbit
Clonality	Recombinant
Calculated MW	123688
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the SREBP family. Contains 1 bHLH (basic helix-loop-helix) domain.
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.
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).
Background Descriptions	This gene encodes a member of the a ubiquitously expressed transcription factor that controls cholesterol homeostasis by regulating transcription of sterol-regulated genes. The encoded protein contains a basic helix-loop-helix-leucine zipper (bHLH-Zip) domain and binds the sterol regulatory element 1 motif. Alternate splicing results in multiple transcript variants. [provided by RefSeq, Jul 2013],

Additional Information

Gene ID	6721
Other Names	SREBP-2; SREBP2; bHLHd2; SREBP2gc; lop13; nuc; Srebf2_retired; XELAEV_18023633mg; SRBP2_CRIGR; SREBF2; Sterol regulatory element-binding transcription factor 2; SRBP2_HUMAN; Class D basic helix-loop-helix protein 2 (bHLHd2); SRBP2_MOUSE; SRBP2_RAT; SRBP2_XENLA; sterol regulatory element binding transcription factor 2; Sterol regulatory element-binding protein 2; Sterol regulatory element-binding

	protein 2 (SREBP-2) (Class D basic helix-loop-helix protein 2) (bHLHd2) (Sterol regulatory element-binding transcription factor 2) [Cleaved into: Processed sterol regulatory element-binding protein 2]; SRBP2; Class D basic helix-loop-helix protein 2; [Cleaved into: Processed sterol regulatory element-binding protein 2]
Dilution	IHC-P=1:50-200,IHC-F=1:50-200,WB=1:500-2000,IF=1:50-200,ELISA=1:5000-10000,IP=1:50-200
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. 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.

Protein Information

Name	SREBF2 {ECO:0000303|PubMed:32322062, ECO:0000312|HGNC:HGNC:11290}
Function	[Sterol regulatory element-binding protein 2]: Precursor of the transcription factor form (Processed sterol regulatory element- binding protein 2), which is embedded in the endoplasmic reticulum membrane (PubMed:32322062). Low sterol concentrations promote processing of this form, releasing the transcription factor form that translocates into the nucleus and activates transcription of genes involved in cholesterol biosynthesis (PubMed:32322062).
Cellular Location	[Sterol regulatory element-binding protein 2]: 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=At high sterol concentrations, the SCAP- SREBP is retained in the endoplasmic reticulum (PubMed:32322062). Low sterol concentrations promote recruitment into COPII-coated vesicles and transport of the SCAP-SREBP to the Golgi, where it is processed (PubMed:32322062).
Tissue Location	Ubiquitously expressed in adult and fetal tissues.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.