Product Name: SREBP-1 (phospho Ser439) Rabbit Polyclonal Antibody
Catalog #: APRab05468
For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	WB,IHC,ICC/IF,ELISA
Reactivity	Human,Rat
Conjugation	Unconjugated
Modification	Phosphorylated
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:5000-1:10000
Molecular Weight	122kDa

Antigen Information

Gene Name	SREBF1
Alternative Names	SREBF1; BHLHD1; SREBP1; Sterol regulatory element-binding protein 1; SREBP-1; Class D basic helix-loop-helix protein 1; bHLHd1; Sterol regulatory element-binding transcription factor 1
Gene ID	6720.0
SwissProt ID	P36956
Immunogen	The antiserum was produced against synthesized peptide derived from human SREBP-1 around the phosphorylation site of Ser439. AA range:405-454

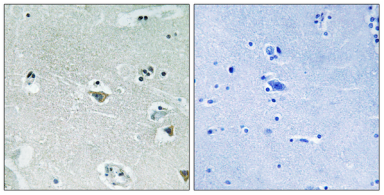
Background

This gene encodes a transcription factor that binds to the sterol regulatory element-1 (SRE1), which is a decamer flanking the low density lipoprotein receptor gene and some genes involved in sterol biosynthesis. The protein is synthesized as a precursor that is attached to the nuclear membrane and endoplasmic reticulum. Following cleavage, the mature protein translocates to the nucleus and activates transcription by binding to the SRE1. Sterols inhibit the cleavage of the precursor, and the mature nuclear form is rapidly catabolized, thereby reducing transcription. The protein is a member of the basic helix-loop-helix-leucine zipper (bHLH-Zip) transcription factor family. This gene is located within the Smith-Magenis syndrome region on chromosome 17. [provided by RefSeq, Mar 2016],alternative products:Additional isoforms seem to exist,function:Transcriptional activator required for lipid homeostasis. Regulates transcription of the LDL receptor gene as well as the fatty acid and to a lesser degree the cholesterol synthesis pathway (By similarity). Binds to the sterol regulatory element 1 (SRE-1) (5'-ATCACCCCAC-3'). Has dual sequence specificity binding to both an E-box motif (5'-ATCACGTGA-3') and to SRE-1 (5'-ATCACCCCAC-3').,online information:Sterol regulatory element-binding protein entry,PTM: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.,sequence caution:Intron retention.,similarity:Belongs to the SREBP family.,similarity:Contains 1 basic helix-loop-helix (bHLH) domain.,subcellular location:Moves from the endoplasmic reticulum to the Golgi in the absence of sterols.,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.,tissue specificity:Expressed in a wide variety of tissues, most abundant in liver and adrenal gland. In fetal tissues lung and liver shows highest expression. Isoform SREBP-1C predominates in liver, adrenal gland and ovary, whereas isoform SREBP-1A predominates in hepatoma cell lines. Isoform SREBP-1A and isoform SREBP-1C are found in kidney, brain, white fat, and muscle.,

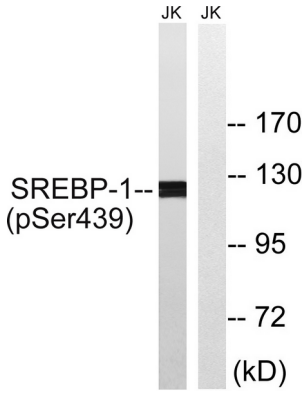
Research Area

AMPK; Protein_Acetylation

Image Data



Immunohistochemistry analysis of paraffin-embedded human brain, using SREBP-1 (Phospho-Ser439) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from Jurkat cells treated with TNF 20ng/ml 30 ', using SREBP-1 (Phospho-Ser439) Antibody. The lane on the right is blocked with the phospho peptide.