Best Tools for immunology Research

SREBP-1 Polyclonal Antibody

Catalog No :	YT6055
Reactivity :	Human;Mouse;Rat;Golden hamster
Applications :	WB;IHC;IF;ELISA
Target :	SREBP-1
Fields :	>>AMPK signaling pathway;>>Insulin signaling pathway;>>Insulin resistance;>>Non-alcoholic fatty liver disease;>>Alcoholic liver disease
Gene Name :	SREBF1 BHLHD1 SREBP1
Protein Name :	SREBP-1
Human Gene Id :	6720
Human Swiss Prot No :	P36956
Mouse Gene Id :	20787
Mouse Swiss Prot No :	Q9WTN3
Immunogen :	Synthesized peptide derived from human SREBP-1. at AA range: 250-330
Specificity :	This antibody detects endogenous levels of SREBP-1
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Polyclonal, Rabbit,IgG
Dilution :	WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:20000.. IF 1:50-200
Purification :	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Concentration :	1 mg/ml

Storage Stability : -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band : 110kD

Cell Pathway : Insulin_Receptor;

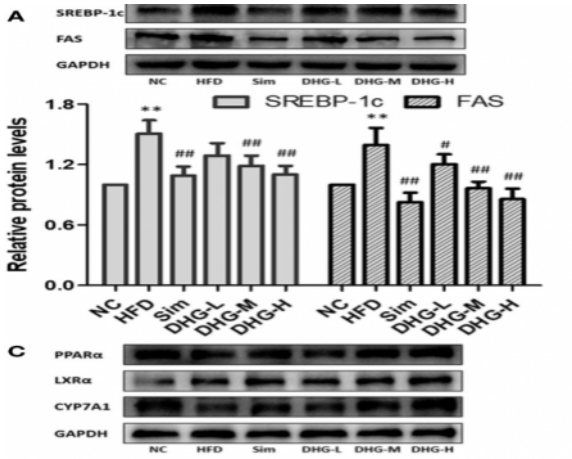
Background : This gene encodes a transcription factor that binds to the sterol regulatory element-1 (SRE1), which is a decamer flanking the low density lipoprotein receptor gene and some genes involved in sterol biosynthesis. The protein is synthesized as a precursor that is attached to the nuclear membrane 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],

Function : 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 fr

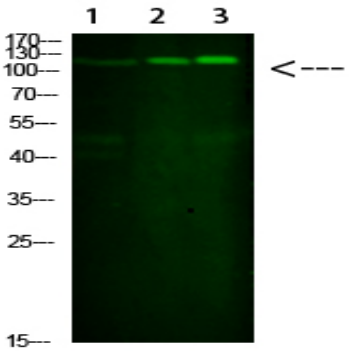
Subcellular Location : [Sterol regulatory element-binding protein 1]: Endoplasmic reticulum membrane ; Multi-pass membrane protein . Golgi apparatus membrane ; Multi-pass membrane protein . Cytoplasmic vesicle, COPII-coated vesicle membrane ; Multi-pass membrane protein . At high sterol concentrations, the SCAP-SREBP is retained in the endoplasmic reticulum. Low sterol concentrations promote recruitment into COPII-coated vesicles and transport of the SCAP-SREBP to the Golgi, where it is processed. .; [Processed sterol regulatory element-binding protein 1]: Nucleus .; [Isoform SREBP-1aDelta]: Nucleus .; [Isoform SREBP-1cDelta]: Nucleus .

Expression : Expressed in a wide variety of tissues, most abundant in liver and adrenal gland (PubMed:8402897). In fetal tissues lung and liver shows highest expression (PubMed:8402897). ; [Isoform SREBP-1A]: Predominates in hepatoma cell lines (PubMed:8402897). Also expressed in kidney, brain, white fat, and muscle (PubMed:8402897). ; [Isoform SREBP-1C]: Predominantly expressed in liver and adipose tissues (PubMed:8402897). Also expressed in kidney, brain, white fat, and muscle (PubMed:8402897).

Products Images



Chen, Kuikui, et al. "Investigation of the lipid-lowering mechanisms and active ingredients of Danhe granule on hyperlipidemia based on systems pharmacology." Frontiers in pharmacology 11 (2020): 528.



Western Blot analysis of 1,mouse-liver 2,hela 3,mouse-brain cells using primary antibody diluted at 1:1000(4°C overnight). Secondary antibody:Goat Anti-rabbit IgG IRDye 800(diluted at 1:5000, 25°C, 1 hour)