



SREBP-1 Polyclonal Antibody

Catalog No	BYab-10754
Isotype	IgG
Reactivity	Human;Mouse;Rat;Golden hamster
Applications	WB;IHC;IF;ELISA
Gene Name	SREBF1 BHLHD1 SREBP1
Protein Name	SREBP-1
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
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB: 1/500 - 1/2000. IHC: 1/100 - 1/300. ELISA: 1/20000.. IF 1:50-200
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	Sterol regulatory element-binding protein 1 (SREBP-1) (Class D basic helix-loop-helix protein 1) (bHLHd1) (Sterol regulatory element-binding transcription factor 1) [Cleaved into: Processed sterol regulatory element-binding protein 1]
Observed Band	110kD
Cell Pathway	[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 .
Tissue Specificity	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

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(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).

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'-ATCACCCAC-3'). Has dual sequence specificity binding to both an E-box motif (5'-ATCACGTGA-3') and to SRE-1 (5'-ATCACCCAC-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

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],

matters needing attention

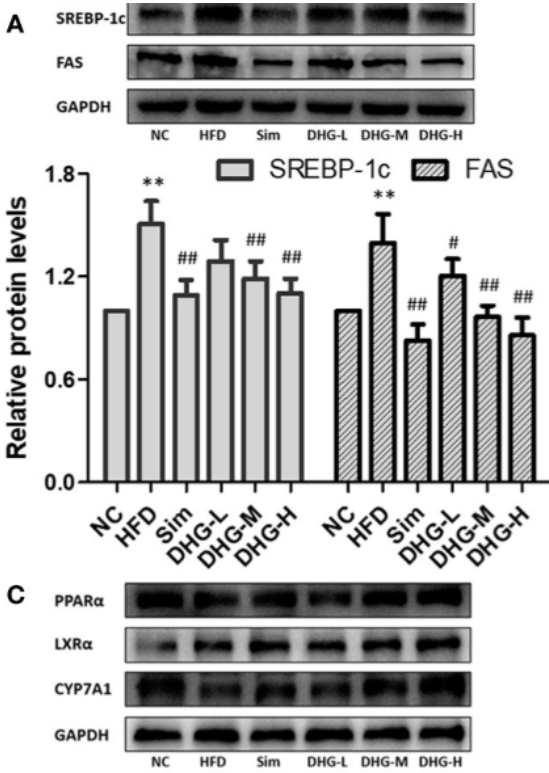
Avoid repeated freezing and thawing!

Usage suggestions

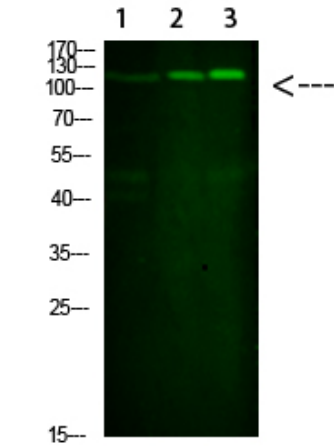
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



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)