

ARG40316 anti-SREBP1 antibody

Package: 50 µg
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes SREBP1
Tested Reactivity	Hu, Ms
Tested Application	IHC-P, WB
Specificity	This antibody is Human and Mouse reactive. At least three isoforms of SREBP1 are known to exist. This SREBP1 antibody is predicted not to cross-react with SREBP2.
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	SREBP1
Species	Human
Immunogen	A 17 amino acid peptide within aa. 450 - 500 of Human SREBP1.
Conjugation	Un-conjugated
Alternate Names	Class D basic helix-loop-helix protein 1; SREBP-1c; bHLHd1; Sterol regulatory element-binding protein 1; Sterol regulatory element-binding transcription factor 1; SREBP1; SREBP-1

Application Instructions

Application table	Application	Dilution
	IHC-P	5 - 20 µg/ml
	WB	1 - 2 µg/ml
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	WB: Daudi IHC-P: Human spleen	
Observed Size	~ 132 kDa	

Properties

Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	PBS and 0.02% Sodium azide.
Preservative	0.02% Sodium azide
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated

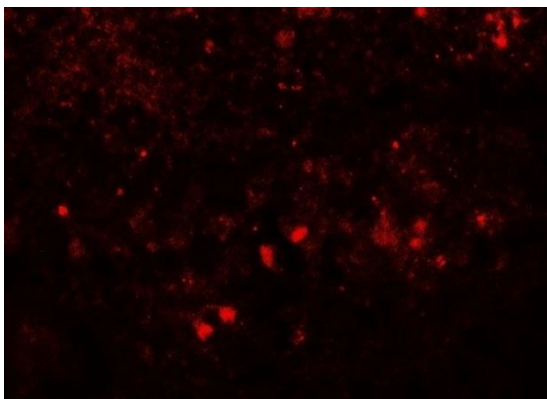
freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

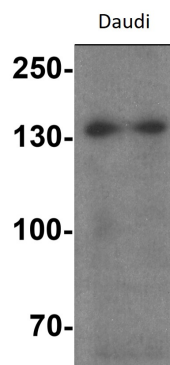
Gene Symbol	SREBF1
Gene Full Name	sterol regulatory element binding transcription factor 1
Background	This gene encodes a transcription factor that binds to the sterol regulatory element-1 (SRE1), which is a decamer flanking the low density lipoprotein receptor gene and some genes involved in sterol 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. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]
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'-ATCAGTGA-3') and to SRE-1 (5'-ATCACCCAC-3'). [UniProt]
Calculated Mw	122 kDa
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. Phosphorylated by AMPK, leading to suppress protein processing and nuclear translocation, and repress target gene expression. Phosphorylation at Ser-402 by SIK1 represses activity possibly by inhibiting DNA-binding (By similarity). [UniProt]

Images



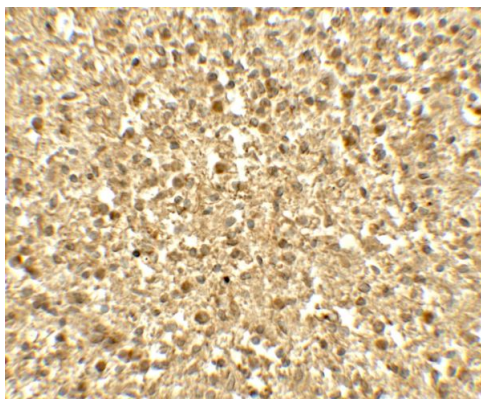
ARG40316 anti-SREBP1 antibody IHC image

Immunohistochemistry: Human spleen tissue stained with ARG40316 anti-SREBP1 antibody at 20 µg/ml dilution.



ARG40316 anti-SREBP1 antibody WB image

Western blot: Daudi cell lysate (both two lanes) stained with ARG40316 anti-SREBP1 antibody at 1 μ g/ml dilution.



ARG40316 anti-SREBP1 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human spleen tissue stained with ARG40316 anti-SREBP1 antibody at 5 μ g/ml dilution.