

SREBF1 Antibody (Center) Blocking Peptide

Synthetic peptide Catalog # BP8732c

Specification

SREBF1 Antibody (Center) Blocking Peptide - Product Information

Primary Accession

P36956

SREBF1 Antibody (Center) Blocking Peptide - Additional Information

Gene ID 6720

Other Names

Sterol regulatory element-binding protein 1, SREBP-1, Class D basic helix-loop-helix protein 1, bHLHd1, Sterol regulatory element-binding transcription factor 1, Processed sterol regulatory element-binding protein 1, SREBF1, BHLHD1, SREBP1

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP8732c was selected from the Center region of human SREBF1. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

SREBF1 Antibody (Center) Blocking Peptide - Protein Information

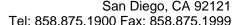
Name SREBF1 {ECO:0000303|PubMed:7759101, ECO:0000312|HGNC:HGNC:11289}

Function

[Sterol regulatory element-binding protein 1]: Precursor of the transcription factor form (Processed sterol regulatory element- binding protein 1), 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 and lipid homeostasis (By similarity).

Cellular Location

[Sterol regulatory element-binding protein 1]: Endoplasmic reticulum membrane; Multi- pass membrane protein. Golgi apparatus membrane {ECO:0000250|UniProtKB:Q9WTN3}; Multi-pass





membrane protein. Cytoplasmic vesicle, COPII-coated vesicle membrane {ECO:0000250|UniProtKB:O9WTN3}; Multi-pass membrane protein. Note=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 {ECO:0000250|UniProtKB:Q9WTN3} [Isoform SREBP-1aDelta]: **Nucleus**

Tissue Location

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-1C]: Predominantly expressed in liver and adipose tissues (PubMed:8402897). Also expressed in kidney, brain, white fat, and muscle (PubMed:8402897)

SREBF1 Antibody (Center) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

Blocking Peptides

SREBF1 Antibody (Center) Blocking Peptide - Images

SREBF1 Antibody (Center) Blocking Peptide - Background

SREBF1 is 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.

SREBF1 Antibody (Center) Blocking Peptide - References

Wang, X., et.al., Cell 77 (1), 53-62 (1994)