

SREBP1 Antibody

Rabbit Polyclonal Antibody Catalog # ABV10749

Specification

SREBP1 Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Isotype Calculated MW WB <u>P56720</u> Human, Mouse, Rat Rabbit Polyclonal Rabbit IgG 120521

SREBP1 Antibody - Additional Information

Gene ID 78968

Positive Control

Application & Usage

Jurkat (Induced and Uninduced), Rat Kidney, 3T3 cell lysates The antibody can be used for Western blot analysis (0.5-4 μ g/ml). However, the optimal conditions should be determined individually. Blocking peptide is available separately.

Other Names

Adipocyte determination- and differentiation-dependent factor 1, ADD1, Sterol regulatory element-binding transcription factor 1

Target/Specificity SREBP1

Antibody Form Liquid

Appearance Colorless liquid

Formulation 100 μ g (0.5 mg/ml) affinity purified rabbit anti-SREBP1polyclonal antibody in phosphate buffered saline (PBS), pH 7.2, containing 30% glycerol, 0.5% BSA, 5 mM EDTA and 0.01% thimerosal.

Handling The antibody solution should be gently mixed before use.

Reconstitution & Storage -20 °C

Background Descriptions



Precautions

SREBP1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

SREBP1 Antibody - Protein Information

Name Srebf1 {ECO:0000312|RGD:69423}

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 (By similarity). 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 {ECO:0000250|UniProtKB:P36956}; Multi- pass membrane protein. Golgi apparatus membrane {ECO:0000250|UniProtKB:Q9WTN3}; Multi-pass membrane protein. Cytoplasmic vesicle, COPII-coated vesicle membrane {ECO:0000250|UniProtKB:Q9WTN3}; 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}

Tissue Location Expressed predominantly in brown adipose tissue.

SREBP1 Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

SREBP1 Antibody - Images





Western blot analysis of SREBP1 with Jurkat cell lysate.

SREBP1 Antibody - Background

SREBP (Sterol Regulatory Element Binding Protein) 1 and 2 are transcription factors that regulates cholesterol homeostasis. SREBP proteins are attached to the endoplasmic reticulum and nuclear envelope. SREBP proteins undergo proteolytic cleavage in response to conditions of low cellular sterol. Upon activation of SREBP 1, a soluble NH2 cleavage fragment translocate to the nucleus and activates transcription of enzymes and other proteins required for cholesterol synthesis.