

Product datasheet

Recombinant Human SREBP1 protein ab159577

[1 Image](#)

Description

Product name	Recombinant Human SREBP1 protein
Expression system	Wheat germ
Protein length	Protein fragment
Animal free	No
Nature	Recombinant
Species	Human
Sequence	VTQLFREHLLERALNCVTQPNPSPGSADGDKEFSDALGY LQLLNCSDDAA GAPAYSFSISSSMATTTGVDPVAKWWASLTAVVIHWLRR DEEAAERLCPL
Amino acids	801 to 900
Tags	GST tag N-Terminus

Specifications

Our **Abpromise guarantee** covers the use of **ab159577** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	Western blot ELISA
Form	Liquid

Additional notes

Preparation and Storage

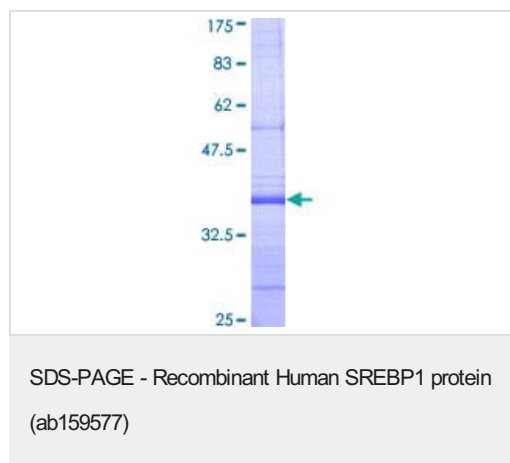
Stability and Storage	Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles. pH: 8.00 Constituents: 0.31% Glutathione, 0.79% Tris HCl
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General Info

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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').
Tissue specificity	Expressed in a wide variety of tissues, most abundant in liver and adrenal gland. In fetal tissues lung and liver shows highest expression. Isoform SREBP-1C predominates in liver, adrenal gland and ovary, whereas isoform SREBP-1A predominates in hepatoma cell lines. Isoform SREBP-1A and isoform SREBP-1C are found in kidney, brain, white fat, and muscle.
Sequence similarities	Belongs to the SREBP family. Contains 1 basic helix-loop-helix (bHLH) domain.
Post-translational modifications	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.
Cellular localization	Nucleus and Endoplasmic reticulum membrane. Golgi apparatus membrane. Cytoplasmic vesicle > COPII-coated vesicle membrane. Moves from the endoplasmic reticulum to the Golgi in the absence of sterols.

Images



ab159577 on a 12.5% SDS-PAGE stained with Coomassie Blue.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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