

Product Specification Sheet

Sterol regulatory element binding Protein 1 (SREBP1; SREBF1) Antibodies

Cat # SREBP1A11-P	Human SREBP1 control peptide	SIZE: 100 ug
Cat # SREBP1A11-A	Rabbit Anti- human SREBP1 IgG (affinity pure)	SIZE: 100 ug

Steroids are a large group of complex tetracyclic lipids that consist of a 17-carbon-ring system. Examples are bile acids, sterols, various hormones and saponins. These hormones are powerful signal molecules that regulate a host of organismal functions.

Sterol regulatory element binding proteins (SREBPs) are membrane-bound transcription factors that control the metabolism of cholesterol and fatty acids in animal cells. Two SREBPs, designated **SREBP-1** and **SREBP-2**, have been isolated and cloned from several mammalian species. Human SREBP-1 and -2 are ~ 50% identical in amino acid sequence. They share the tripartite structure, and they both have the capacity to activate the same genes. Although the two proteins can form heterodimers, this does not appear necessary for their function.

SREBP1: Mouse- 1134 aa; rat- 1133 aa; human- 1147 aa, ~121.6 kDa; Chromosome- 17p11.2. Isoform SREBP-1C predominates in liver, adrenal gland, brain and adipose tissue, whereas isoform SREBP-1A predominates in spleen. Isoform SREBP-1A and isoform SREBP-1C are found in kidney, thymus, testis, muscle, jejunum, and ileum.

Source of Antigen, Antibodies

Antigen	17- aa peptide of Human SREBP1 (Accession # P36956 ; ref. 1); designated as SREBP1A11-P control/blocking peptide conjugated to KLH; epitope location ~ C-terminus
Antibody host/type	Rabbit, Polyclonal IgG (Cat # SREBP1A11-A), purified over antigen-Agarose
Secondary Ab	Cat # 20320, goat anti-rabbit IgG-HRP (AP, biotin, FITC conjugates also available).
Negative Control Ab	Non-immune rabbit IgG (Cat # 20009-1) to be used as -ve control for ELISA, WB, IHC etc.

Form & Storage of Antibodies/Peptide Control

Affinity pure IgG

100 ug/100ul solution lyophilized powder
Supplied in **Buffer:** PBS+0.1% BSA
Reconstitute powder in PBS at 1mg/ml

Control/blocking peptide

100 ug/100 ul solution lyophilized powder
Supplied in **Buffer:** PBS pH 7.5,
Reconstitute powder in PBS at 1 mg/ml

Storage

Short-term: unopened, undiluted vials for less than a week at 4°C.

Long-term: at -20°C or below in suitable aliquots after reconstitution. Do not freeze and thaw and store working, diluted solutions.

Stability: 6-12 months at -20°C or below.

Shipping: 4°C for solutions and room temp for powder.

Recommended Usage

Western Blotting: 1-10 µg/ml; using affinity pure antibody (chemiluminescence technique).

ELISA: 1:100K; using 50-100 ng control peptide/well.

Histochemistry & Immunofluorescence: Not tested; we recommend the use of affinity purified antibody at 2-10 µg/ml.

Specificity & Cross-reactivity

Human SREBP1A11-P peptide sequence is 94% identical in mouse and 59% identical in rat SREBP protein. We recommend using antibody Cat # SREBP1c31-A against human SREBP-1- A and C isoforms. Antibody cross-reactivity in various species is not known. The control peptide, because of its low mol. Wt (<3 kDa), is not suitable for Western. It should be used for ELISA or antibody blocking experiments (use 5-10 ug control peptide per 1 ug of aff pure IgG or 1 ul antiserum) to confirm antibody specificity (see detailed protocol at the web site).

General References:

- (1) Shimomura I, et al., (1997) J. Clin. Invest. 99:838-845.

List of related items, data sheets, and publications, using ADI antibodies is posted on the web site

*This product is for in vitro research use only.

Related material available from ADI

Human, and mouse Sterol regulatory element binding proteins:

SREBP1A11-A-P 70301J