ALPHA DIAGNOSTIC INTERNATIONAL

Product Specification Sheet

Life Technologies™ Your Molecular & Cell Technology Partner

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

Cat # SREBP13-P	Human SREBP1 control peptide	**SIZE**: 100 ug
Cat # SREBP13-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: Rat- 1133 aa; human- 1147 aa; human- 1134 aa;, ~121.6 kDa; Chromosome 11B2. 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	16- aa peptide of Human SREBP1 (Protein accession # P36956; ref. 1); designated as SREBP13-P control/blocking peptide conjugated to KLH; epitope location ~ C-terminus
Antibody host/type	Rabbit, Polyclonal IgG (Cat # SREBP13-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 or 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 SREBP13-P peptide sequence is 100% conserved in human SERBP1isoforms B and C. We recommend using antibody Cat # SREBP1A11-A against human SREBP-1 isoforms A. 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

Antibodies to Human, mouse and rat Sterol regulatory element binding proteins:

SREBP13-A-P 70314J

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