

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human SREBP2 in direct ELISAs and Western blots. In direct ELISAs, less than 1% cross-reactivity with recombinant human (rh) SREBP1B and rhSREBP1C is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human SREBP2 Leu242-Asp450 Accession # Q12772
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

Western Blot	Optimal dilution of this antibody should be experimentally determined.
Chromatin Immunoprecipitation (ChIP)	Optimal dilution of this antibody should be experimentally determined.
Immunocytochemistry	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

SREBP2 (Sterol Regulatory Element-Binding Protein 2; also bHLHD2 and SREBF2) is a 120-125 kDa member of the SREBP family of proteins. It is ubiquitously expressed and found in the intracellular membrane fraction of cells. SREBP2 is a transcriptional factor initially embedded in the ER as an inactive precursor associated with SCAP. When necessary, SCAP mediates SREBP2 transfer to the Golgi, where two resident proteases remove the N-terminus from SREBP2, and the N-terminus is transported into the nucleus. Here, SREBP2 acts as a transcription factor, activating the LDLR and cholesterol synthesis genes. The human SREBP2 precursor is an 1141 amino acid (aa) two transmembrane protein whose N- and C-termini are cytoplasmic. The two cytoplasmic domains span aa 1-479 and 555-1141, respectively. Proteolytic cleavage between Leu484-Cys485 generates the 64-66 kDa SREBP2 transcription factor. This fragment contains a bHLH DNA binding domain (aa 330-380) and one Leu zipper region (aa 381-401). Homodimerization of SREBP2 is necessary for nuclear translocation. There is one potential isoform that shows a deletion of aa 274-276 coupled to a 96 aa substitution for aa 580-1141. A second isoform (known in rodent) shows a premature truncation after Val463 and runs at 55 kDa in SDS-PAGE. Over aa 242-450, human SREBP2 shares 97% aa identity with mouse SREBP2.

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