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SREBF2 Antibody

Catalog # ASC11812

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	Q12772
Other Accession	NP_004590, 27477113
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	123688
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	SREBF2 antibody can be used for detection of SREBF2 by Western blot at 1 - 2 g/ml. Antibody can also be used for Immunohistochemistry at 5 g/mL. For Immunoflorescence start at 20 g/mL.

Additional Information

Gene ID	6721
Other Names	Sterol regulatory element-binding protein 2, SREBP-2, Class D basic helix-loop-helix protein 2, bHLHd2, Sterol regulatory element-binding transcription factor 2, Processed sterol regulatory element-binding protein 2, SREBF2, BHLHD2, SREBP2
Target/Specificity	SREBF2; SREBF2 antibody is human and mouse reactive. At least three isoforms of SREBF2 are known to exist. SREBF2 antibody is predicted not to cross-react with SREBF1.
Reconstitution & Storage	SREBF2 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year.
Precautions	SREBF2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	SREBF2 {ECO:0000303|PubMed:32322062, ECO:0000312|HGNC:HGNC:11290}
Function	[Sterol regulatory element-binding protein 2]: Precursor of the transcription factor form (Processed sterol regulatory element- binding protein 2), which is embedded in the endoplasmic reticulum membrane (PubMed:32322062). 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

(PubMed:32322062).

Cellular Location [Sterol regulatory element-binding protein 2]: Endoplasmic reticulum membrane; Multi- pass membrane protein. Golgi apparatus membrane; Multi-pass membrane protein. Cytoplasmic vesicle, COPII-coated vesicle membrane; Multi-pass membrane protein. Note=At high sterol concentrations, the SCAP- SREBP is retained in the endoplasmic reticulum (PubMed:32322062). Low sterol concentrations promote recruitment into COPII-coated vesicles and transport of the SCAP-SREBP to the Golgi, where it is processed (PubMed:32322062).

Tissue Location Ubiquitously expressed in adult and fetal tissues.

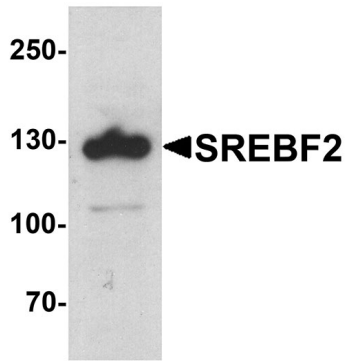
Background

The sterol regulatory element binding transcription factor 2 (SREBF2) is a transcription factor that binds to the sterol regulatory element-1 (SRE1), which is a decamer flanking the low density lipoprotein receptor gene and some genes involved in sterol biosynthesis (1,2). The related protein SREBF1 also binds SRE1 and activates transcription in an additive fashion to SREBF2 (2). SREBF2 has been more closely associated with cholesterol synthesis and accumulation, while the SREBF1 proteins are important in the regulation of genes involved in lipid metabolism (3).

References

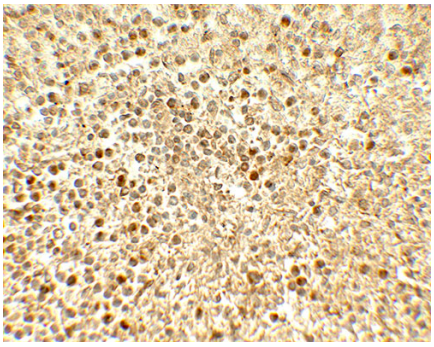
Hua X, Yokoyama C, Wu J, et al. SREBP-2, a second basic-helix-loop-helix-leucine zipper protein that stimulates transcription by binding to a sterol regulatory element. Proc. Natl. Acad. Sci. USA 1993; 90:11603-7.
Wang X, Briggs MR, Hua X, et al. Nuclear protein that binds sterol regulatory element of low density lipoprotein receptor promoter. II. Purification and characterization. J. Biol. Chem. 1993; 268:14497-504.
Raghow R, Yellaturu C, Deng X, et al. SREBPs: the crossroads of physiological and pathological homeostasis. Endocrinol. Metab. 2008; 19:65-73.

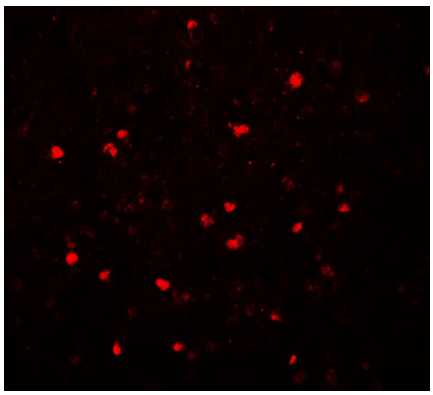
Images



Western blot analysis of SREBF2 in PC-3 cell lysate with SREBF1 antibody at 1 µg/ml.

Immunohistochemistry of SREBF2 in human spleen tissue with SREBF2 antibody at 5 µg/mL.





Immunofluorescence of SREBF2 in human spleen tissue with SREBF2 antibody at 20 µg/mL.