

SREBF2 Antibody

Catalog # ASC11812

Specification

SREBF2 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW

Application Notes

WB, IHC, IF <u>O12772</u> <u>NP_004590</u>, <u>27477113</u> Human, Mouse Rabbit Polyclonal IgG Predicted: 126 kDa

Observed: 128 kDa KDa SREBF2 antibody can be used for detection of SREBF2 by Western blot at 1 - 2 µg/ml. Antibody can also be used for Immunohistochemistry at 5 µg/mL. For Immunoflorescence start at 20 µg/mL.

SREBF2 Antibody - Additional Information

Gene ID 6721 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°C for three months and -20°C, stable for up to one year.

Precautions SREBF2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

SREBF2 Antibody - 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:<a href="http://www.uniprot.org/citations/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

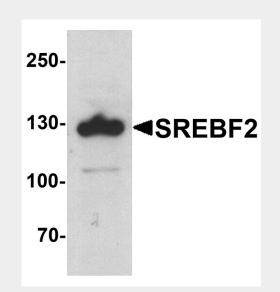
Ubiquitously expressed in adult and fetal tissues.

SREBF2 Antibody - Protocols

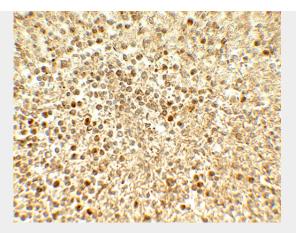
Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

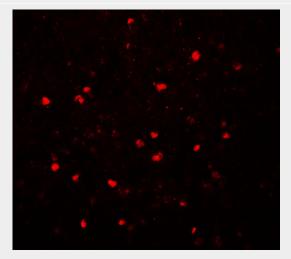
SREBF2 Antibody - Images



Western blot analysis of SREBF2 in PC-3 cell lysate with SREBF1 antibody at $1 \mu g/ml$.



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 μ g/mL.

SREBF2 Antibody - 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).

SREBF2 Antibody - 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.