

BSCL2 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP10112a

Specification

BSCL2 Antibody (N-term) - Product Information

Application Primary Accession Other Accession

Reactivity Predicted Host Clonality Isotype Antigen Region WB, IHC-P,E <u>O96G97</u> <u>O5E9P6</u>, <u>NP_001116427.1</u>, <u>NP_001124174.1</u>, <u>NP_116056.3</u> Human, Mouse Bovine Rabbit Polyclonal Rabbit IgG 78-107

BSCL2 Antibody (N-term) - Additional Information

Gene ID 26580

Other Names Seipin, Bernardinelli-Seip congenital lipodystrophy type 2 protein, BSCL2

Target/Specificity

This BSCL2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 78-107 amino acids from the N-terminal region of human BSCL2.

Dilution WB~~1:2000 IHC-P~~1:50~100

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

BSCL2 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

BSCL2 Antibody (N-term) - Protein Information

Name BSCL2



Function Plays a crucial role in the formation of lipid droplets (LDs) which are storage organelles at the center of lipid and energy homeostasis (PubMed:<u>19278620</u>, PubMed:<u>21533227</u>, PubMed:<u>31708432</u>, PubMed:<u>30293840</u>). In association with LDAF1, defines the sites of LD formation in the ER (PubMed:<u>31708432</u>). Also required for growth and maturation of small nascent LDs into larger mature LDs (PubMed:<u>27564575</u>). Mediates the formation and/or stabilization of endoplasmic reticulum-lipid droplets (ER-LD) contacts, facilitating protein and lipid delivery from the ER into growing LDs (PubMed:<u>31178403</u>, PubMed:<u>27879284</u>). Regulates the maturation of ZFYVE1- positive nascent LDs and the function of the RAB18-ZFYVE1 complex in mediating the formation of ER-LD contacts (PubMed:<u>30970241</u>). Binds anionic phospholipids including phosphatidic acid (PubMed:<u>30293840</u>). Plays an important role in the differentiation and development of adipocytes (By similarity).

Cellular Location

Endoplasmic reticulum membrane; Multi-pass membrane protein. Lipid droplet Note=Localizes at endoplasmic reticulum-lipid droplets (ER-LD) contact sites.

Tissue Location

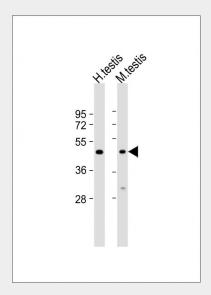
Expressed in motor neurons in the spinal cord and cortical neurons in the frontal lobe (at protein level). Highly expressed in brain, testis and adipose tissue

BSCL2 Antibody (N-term) - Protocols

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

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

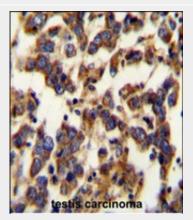
BSCL2 Antibody (N-term) - Images



All lanes : Anti-BSCL2 Antibody (N-term) at 1:2000 dilution Lane 1: Human testis lysate Lane 2: Mouse testis lysate Lysates/proteins at 20 μ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L),



Peroxidase conjugated at 1/10000 dilution. Predicted band size : 44 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



BSCL2 Antibody (N-term) (Cat. #AP10112a) immunohistochemistry analysis in formalin fixed and paraffin embedded human testis carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the BSCL2 Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.

BSCL2 Antibody (N-term) - Background

This gene encodes protein seipin, which is located in the endoplasmic reticulum and may be important for lipid droplet morphology. Mutations in this gene have been associated with congenital generalized lipodystrophy type 2 or Berardinelli-Seip syndrome, a rare autosomal recessive disease characterized by a near absence of adipose tissue and severe insulin resistance. Alternatively spliced transcript variants encoding different isoforms have been found for this gene.

BSCL2 Antibody (N-term) - References

Rakocevic-Stojanovic, V., et al. J. Neurol. Sci. 296 (1-2), 107-109 (2010) : Luigetti, M., et al. Muscle Nerve 42(3):448-451(2010) Nishiyama, A., et al. Pediatr Int 51(6):775-779(2009) Wu, Y.R., et al. J. Neurol. Neurosurg. Psychiatr. 80(10):1180-1181(2009) Chen, W., et al. Endocrinology 150(10):4552-4561(2009)