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SPG20 Antibody (N-term) Blocking Peptide

Synthetic peptide
Catalog # BP9040a

Specification

SPG20 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession Q8N0X7

SPG20 Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 23111

Other Names
Spartin, Spastic paraplegia 20 protein, Trans-activated by hepatitis C virus core protein 1, SPG20, KIAA0610, TAHCCP1

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP9040a was selected from the N-term region of human SPG20. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

SPG20 Antibody (N-term) Blocking Peptide - Protein Information

Name SPART (HGNC:18514)

Function
Lipophagy receptor that plays an important role in lipid droplet (LD) turnover in motor neurons (PubMed:37443287). Localizes to LDs and interacts with components of the autophagy machinery, such as MAP1LC3A/C proteins to deliver LDs to autophagosomes for degradation via lipophagy (PubMed:37443287). Lipid transfer protein required for lipid droplet degradation, including by lipophagy (PubMed:38190532). Can bind and transfer all lipid species found in lipid droplets, from phospholipids to triglycerides and sterol esters but the direction of lipid transfer by spartin and its cargos are unknown (PubMed:38190532). May be implicated in endosomal trafficking, or microtubule dynamics, or both. Participates in cytokinesis

(PubMed:20719964).

Cellular Location
Cytoplasm. Midbody. Lipid droplet Note=Transiently associated with endosomes (PubMed:19580544) Colocalized with IST1 to the ends of Flemming bodies during cytokinesis (PubMed:20719964).

Tissue Location
Ubiquitously expressed, with highest levels of expression detected in adipose tissue

SPG20 Antibody (N-term) Blocking Peptide - Protocols

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

- Blocking Peptides

SPG20 Antibody (N-term) Blocking Peptide - Images

SPG20 Antibody (N-term) Blocking Peptide - Background

SPG20 is a protein containing a MIT (Microtubule Interacting and Trafficking molecule) domain, and is implicated in regulating endosomal trafficking and mitochondria function. The protein localizes to mitochondria and partially co-localizes with microtubules. Stimulation with epidermal growth factor (EGF) results in protein translocation to the plasma membrane, and the protein functions in the degradation and intracellular trafficking of EGF receptor.

SPG20 Antibody (N-term) Blocking Peptide - References

Milewska,M., et.al., J. Neurochem. 111 (4), 1022-1030 (2009);Edwards,T.L., et.al., Biochem. J. 423 (1), 31-39 (2009).