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# SPG20 Antibody (N-term)

**Affinity Purified Rabbit Polyclonal Antibody (Pab)**

**Catalog # AP9040a**

## Specification

### SPG20 Antibody (N-term) - Product Information

| | |
|---|---|
| Application | **FC, IHC-P, WB,E** |
| Primary Accession | Q8N0X7 |
| Other Accession | Q8R1X6, A0JNJ3 |
| Reactivity | **Human** |
| Predicted | **Bovine, Mouse** |
| Host | **Rabbit** |
| Clonality | **Polyclonal** |
| Isotype | **Rabbit IgG** |
| Calculated MW | **72833** |
| Antigen Region | **18-45** |

### SPG20 Antibody (N-term) - 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**
This SPG20 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 18-45 amino acids from the N-terminal region of human SPG20.

**Dilution**
FC~~1:10~50
IHC-P~~1:50~100
WB~~1:1000
E~~Use at an assay dependent concentration.

**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**
SPG20 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

### SPG20 Antibody (N-term) - 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).

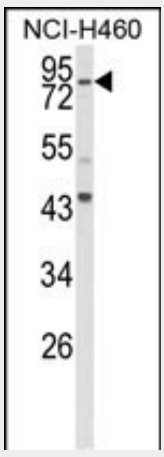
**Tissue Location**
Ubiquitously expressed, with highest levels of expression detected in adipose tissue

## SPG20 Antibody (N-term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## SPG20 Antibody (N-term) - Images




Western blot analysis of SPG20 Antibody (N-term) (Cat. #AP9040a) in NCI-H460 cell line lysates (35ug/lane). SPG20 (arrow) was detected using the purified Pab.

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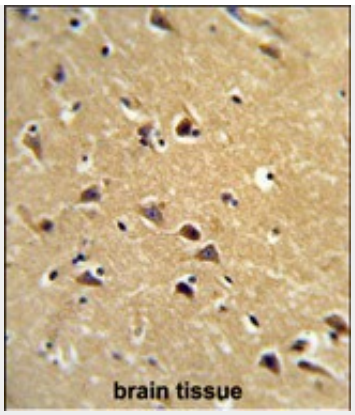
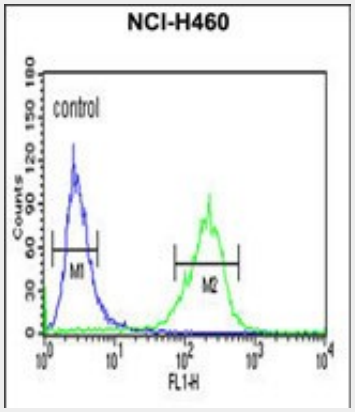



Formalin-fixed and paraffin-embedded human brain tissue reacted with SPG20 Antibody (N-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.




SPG20 Antibody (N-term) (Cat. #AP9040a) flow cytometric analysis of NCI-H460 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

**SPG20 Antibody (N-term) - 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) - References**

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