10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

SPG20/Spartin Rabbit pAb

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Catalog # AP56779

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q8N0X7
Predicted	Human, Mouse, Rat, Rabbit
Host	Rabbit
Clonality	Polyclonal
Calculated MW	72833
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human SPG20/Spartin
Epitope Specificity	131-230/666
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Contains 1 MIT domain.
SUBUNIT	Interacts with ITCH and WWP1.
DISEASE	Interacts with ITCH and WWP1.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	This gene encodes 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. Multiple alternatively spliced variants, encoding the same protein, have been identified. Mutations associated with this gene cause autosomal recessive spastic paraplegia 20 (Troyer syndrome). [provided by RefSeq, Nov 2008]

Additional Information

Gene ID	23111
Other Names	Spartin, Spastic paraplegia 20 protein, Trans-activated by hepatitis C virus core protein 1, SPART (HGNC:18514)
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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

Background

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