

SPARTIN Antibody (internal region)

Peptide-affinity purified goat antibody Catalog # AF2902a

Specification

SPARTIN Antibody (internal region) - Product Information

Application WB, IF, E
Primary Accession O8N0X7

Other Accession NP 055902.1, 23111

Reactivity
Host
Clonality
Concentration
Goat
Concentration

Isotype IgG
Calculated MW 72833

SPARTIN Antibody (internal region) - Additional Information

Gene ID 23111

Other Names

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

Dilution

WB~~1:1000 IF~~1:50~200 E~~N/A

Format

0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

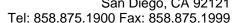
SPARTIN Antibody (internal region) is for research use only and not for use in diagnostic or therapeutic procedures.

SPARTIN Antibody (internal region) - 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

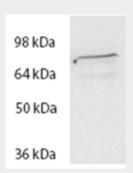
Ubiquitously expressed, with highest levels of expression detected in adipose tissue

SPARTIN Antibody (internal region) - Protocols

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

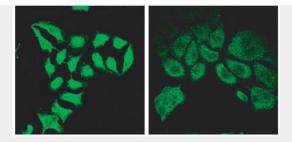
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

SPARTIN Antibody (internal region) - Images

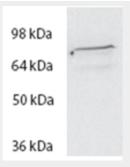


AF2902a (2 µg/ml) staining of HeLa lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

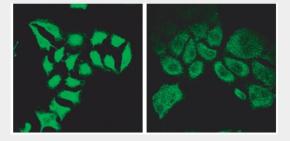




AF2902a (2 μ g/ml) staining of methanol-fixed HeLa before (left) and after (right) introduction of siRNA.



EB09136 ($2\mu g/ml$) staining of HeLa lysate ($35\mu g$ protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.



EB09136 ($2\mu g/ml$) staining of methanol-fixed HeLa before (left) and after (right) introduction of siRNA.

SPARTIN Antibody (internal region) - References

The hereditary spastic paraplegia protein spartin localises to mitochondria Lu J, Rashid F, Byrne PC. J Neurochem. 2006 Sep;98(6):1908-19. PMID: 16945107