### For Research Use Only

# Spartin, SPG20 Polyclonal antibody

Catalog Number: 13791-1-AP

**Featured Product** 

14 Publications



### **Basic Information**

Catalog Number: GenBank Accession Number: 13791-1-AP BC047083

GeneID (NCBI):

150ul, Concentration: 800 µg/ml by 23111 Nanodrop;

Source: spastic paraplegia 20 (Troyer

Rabbit syndrome) Calculated MW: Isotype: 75 kDa, 85 kDa IgG Immunogen Catalog Number: Observed MW:

75-84 kDa AG4815

# **Applications**

**Tested Applications:** 

FC, IHC, IP, WB, ELISA **Cited Applications:** 

IF, IHC, IP, WB

Species Specificity: human, mouse, rat

**Cited Species:** 

human, mouse

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

#### Positive Controls:

WB: HEK-293 cells, HeLa cells, NIH/3T3 cells

IP: HeLa cells,

IHC: human liver cancer tissue, human breast cancer

**Purification Method:** 

WB 1:2000-1:10000

IHC 1:400-1:1600

for WB

Antigen affinity purification

IP 0.5-4.0 ug for IP and 1:1000-1:4000

Recommended Dilutions:

tissue

# **Background Information**

SPG20 (spastic paraplegia 20) gene encodes a multifunctional Spartin protein. SPG20 protein is highly expressed in adipose tissue and may be implicated in endosomal trafficking and microtubule dynamics. SPG20 is mutated in Troyer syndrome, a hereditary spastic paraplegia defined by degeneration of upper motor neurons, recent study showed that regulation of SPG20 on mitochondrial calcium homeostasis may contribute to the pathophysiology of Troyer syndrome. Hypermethylation of SPG20 promoter, found in colorectal cancer patients, may play a role in cytokinesis arrest in colorectal tumorigenesis.

## **Notable Publications**

Author	Pubmed ID	Journal	Application
Lind G E GE	21499309	Oncogene	WB,IF
Urbanczyk Andreas A	21707618	J Neurochem	IHC,IF
Joshua M Nicholson	25942454	Elife	WB

### Storage

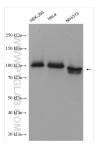
Store at -20°C. Stable for one year after shipment.

Storage Buffer

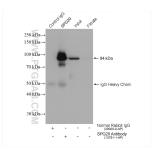
PBS with 0.02% sodium azide and 50% glycerol pH 7.3. Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

## **Selected Validation Data**



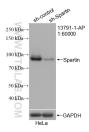
Various lysates were subjected to SDS PAGE followed by western blot with 13791-1-AP (Spartin, SPG20 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



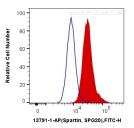
IP result of anti-Spartin, SPG20(IP:13791-1-AP, 4ug; Detection:13791-1-AP 1:2000) with HeLa cells lysate 2320 ug.



Immunohistochemical analysis of paraffinembedded human liver cancer tissue slide using 13791-1-AP (Spartin, SPG20 antibody) at dilution of 1:800 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



WB result of Spartin, SPG20 antibody (13791-1-AP; 1:60000; incubated at room temperature for 1.5 hours) with sh-Control and sh-Spartin, SPG20 transfected HeLa cells.



1X10^6 HepG2 cells were intracellularly stained with 0.2 ug Anti-Human Spartin, SPG20 (13791-1-AP) and CoraLite® 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.2 ug Control Antibody. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).