

For Research Use Only

STMN4 Polyclonal antibody

Catalog Number: 12027-1-AP

3 Publications



Basic Information

Catalog Number:

12027-1-AP

Size:

150ul, Concentration: 750 ug/ml by Nanodrop and 413 ug/ml by Bradford method using BSA as the standard;

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG2657

GenBank Accession Number:

BC011520

GeneID (NCBI):

81551

UNIPROT ID:

Q9H169

Full Name:

stathmin-like 4

Calculated MW:

216 aa, 25 kDa

Observed MW:

22-30 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB 1:1000-1:4000

IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

IHC 1:50-1:500

Applications

Tested Applications:

WB, IP, IHC, ELISA

Cited Applications:

WB, IF

Species Specificity:

human, mouse, rat

Cited Species:

mouse

Positive Controls:

WB : human brain tissue, rat brain tissue

IP : mouse brain tissue,

IHC : human gliomas tissue, human brain tissue

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

Background Information

RB3 (Stathmin-4), encoded by STMN4 gene, is a neuron-specific homologue of the SCG10/stathmin family proteins, possessing a unique N-terminal membrane-associated domain and the stathmin-like domain at the C terminus, which promotes microtubule (MT) catastrophe and/or tubulin sequestering. Stathmin is a ubiquitous cytosolic phosphoprotein, preferentially expressed in the nervous system, and described as a relay integrating diverse intracellular signaling pathways. RB3 is consistently up-regulated in differentiated neuroblastoma cells, and stable expression of transfected RB3 could induce differentiation, suggesting a role of RB3 during neuroblastoma differentiation. Moreover, increased RB3 is a unique response protein in the stathmin-related proteins following optical nerve axotomy and RB3 may be a critical target for neurodegenerative diseases. STMN4 has 4 isoforms with MW 25, 23, 22 and 19 kDa (refer to UniProt). Another 30 kDa isoform can be found by NCBI Protein Blast. (https://www.ncbi.nlm.nih.gov/protein/XP_005273709)

Notable Publications

Author	Pubmed ID	Journal	Application
Kelsey L Krus	35767949	Cell Rep	WB
Yuanjun Li	37283026	J Cell Sci	WB
Tuan Vo	37127652	Genome Med	IF

Storage

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

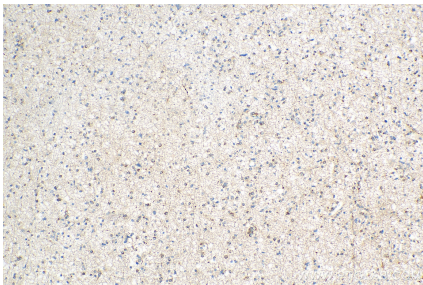
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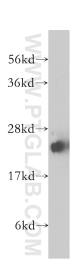
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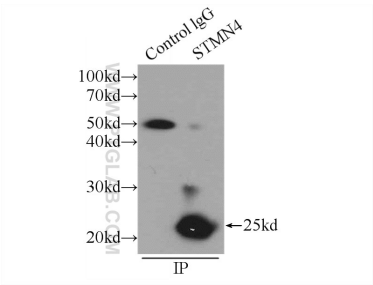
Selected Validation Data



Immunohistochemical analysis of paraffin-embedded human gliomas tissue slide using 12027-1-AP (STMN4 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



human brain tissue were subjected to SDS PAGE followed by western blot with 12027-1-AP (STMN4 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



IP result of anti-STMN4 (IP:12027-1-AP, 3ug; Detection:12027-1-AP 1:1000) with mouse brain tissue lysate 6000ug.