

For Research Use Only

STMN4 Polyclonal antibody

Catalog Number: 12027-1-AP **3 Publications**



Basic Information

| | | |
|--|---|---|
| Catalog Number: 12027-1-AP | GenBank Accession Number: BC011520 | Purification Method: Antigen affinity purification |
| Size: 750 µg/ml | GeneID (NCBI): 81551 | Recommended Dilutions: WB 1:1000-1:4000 IP 0.5-4.0 µg for 1.0-3.0 mg of total protein lysate IHC 1:50-1:500 |
| Source: Rabbit | UNIPROT ID: Q9H169 | |
| Isotype: IgG | Full Name: stathmin-like 4 | |
| Immunogen Catalog Number: AG2657 | Calculated MW: 216 aa, 25 kDa Observed MW: 22-30 kDa | |

Applications

| | |
|---|--|
| Tested Applications: IHC, IP, WB, ELISA | Positive Controls: |
| Cited Applications: WB, IF | WB : human brain tissue, rat brain tissue |
| Species Specificity: human, mouse, rat | IP : mouse brain tissue, |
| Cited Species: mouse | 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

For technical support and original validation data for this product please contact:

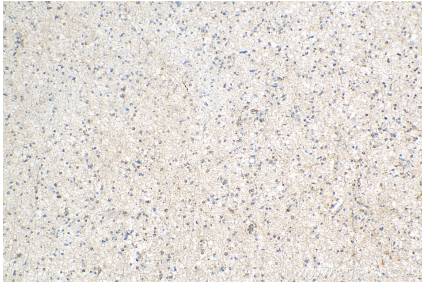
T: 4006900926

E: Proteintech-CN@ptglab.com

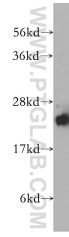
W: ptgcn.com

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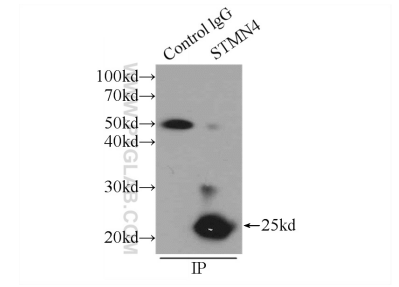
Selected Validation Data



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.