

For Research Use Only

SYNGAP1 Polyclonal antibody

Catalog Number: 19739-1-AP **6 Publications**



Basic Information

Catalog Number:

19739-1-AP

Size:

550 µg/ml

Source:

Rabbit

Isotype:

IgG

GenBank Accession Number:

NM_006772

GeneID (NCBI):

8831

UNIPROT ID:

Q96PV0

Full Name:

synaptic Ras GTPase activating protein 1 homolog (rat)

Calculated MW:

1343 aa, 148 kDa

Observed MW:

148 kDa

Purification Method:

Antigen affinity purification

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

IF 1:50-1:500

Applications

Tested Applications:

IF/ICC, IHC, IP, WB, ELISA

Cited Applications:

WB, IHC

Species Specificity:

human, mouse, rat, pig

Cited Species:

mouse

Positive Controls:

WB: mouse brain tissue, rat brain tissues, pig brain tissues

IP: mouse brain tissue,

IHC: mouse brain tissue,

IF: U-251 cells,

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

SYNGAP1, also named as KIAA1938, is the major constituent of the PSD essential for postsynaptic signaling. It's an inhibitory regulator of the Ras-cAMP pathway. SYNGAP1 is a member of the NMDAR signaling complex in excitatory synapses, it may play a role in NMDAR-dependent control of AMPAR potentiation, AMPAR membrane trafficking and synaptic plasticity. SYNGAP1 regulates AMPAR-mediated miniature excitatory postsynaptic currents. SYNGAP1 may be involved in certain forms of brain injury, leading to long-term learning and memory deficits. Defects in SYNGAP1 are the cause of mental retardation autosomal dominant type 5 (MRD5).

Notable Publications

Author	Pubmed ID	Journal	Application
Shangru Lyu	36244636	Neuroscience	WB
Sydney Aten	33174316	Eur J Neurosci	WB,IHC
Cong-Cong Qi	33732137	Front Aging Neurosci	WB

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:

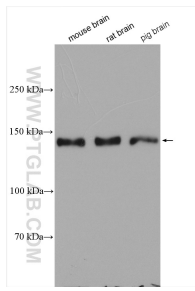
T: 4006900926

E: Proteintech-CN@ptglab.com

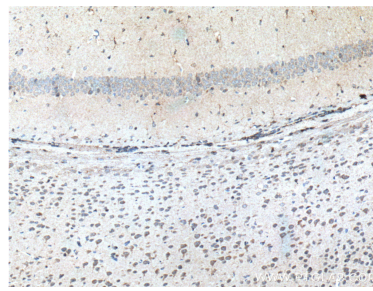
W: ptgcn.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

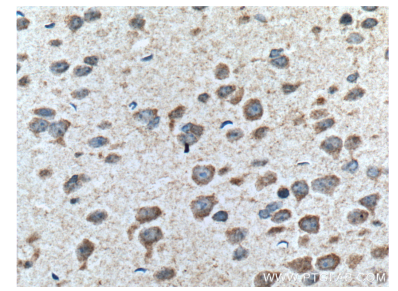
Selected Validation Data



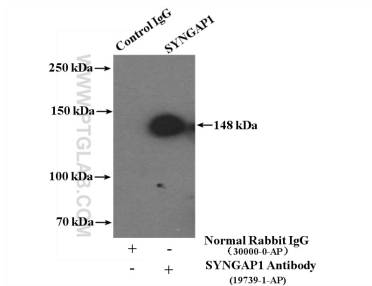
Various lysates were subjected to SDS PAGE followed by western blot with 19739-1-AP (SYNGAP1 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



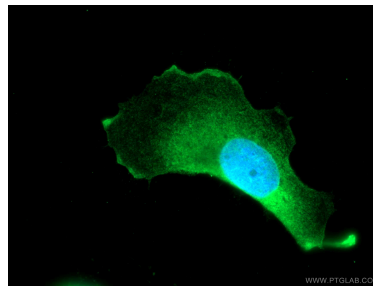
Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 19739-1-AP (SYNGAP1 Antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 19739-1-AP (SYNGAP1 Antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



IP result of anti-SYNGAP1 (IP:19739-1-AP, 4ug; Detection:19739-1-AP 1:500) with mouse brain tissue lysate 4000ug.



Immunofluorescent analysis of (-20°C Ethanol) fixed U-251 cells using 19739-1-AP (SYNGAP1 antibody), at dilution of 1:100 and CoraLite@488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).