For Research Use Only

SNAP25 Monoclonal antibody

Catalog Number:60159-1-Ig 4 Publications

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Basic Information

Catalog Number:
60159-1-Ig

Size:
150ul , Concentration: 1613 μg/ml by Bradford method using BSA as the standard;

Source:
Mouse

Isotype:
IgG2b

Immunogen Catalog Number:
AG6695

GenBank Accession Number:
BC010647

GeneID (NCBI):
6616

Full Name:
synaptosomal-associated protein, 25kDa

Calculated MW:
23 kDa

Observed MW:
25-30 kDa

Purification Method:
Protein A purification

CloneNo.:
3E4B7

Recommended Dilutions:
WB 1:5000-1:20000
IP 0.5-4.0 ug for IP and 1:500-1:1000 for WB
IHC 1:1000-1:4000
IF 1:10-1:100

Applications

Tested Applications:
IF, IHC, IP, WB,ELISA

Cited Applications:
IF, IHC, WB

Species Specificity:
human, mouse, rat, pig

Cited Species:
human, mouse, rat

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 : pig brain tissue, fetal human brain tissue, PC-12 cells, HEK-293 cells, rat brain tissue, mouse brain tissue

IP : mouse brain tissue,

IHC : rat brain tissue, mouse brain tissue

IF : PC-12 cells,

Background Information

The synaptosomal associated protein of 25 kD (SNAP-25) was first identified as a major synaptic protein by Wilson and colleagues. The protein interacts with syntaxin and synaptobrevin through its N-terminal and C-terminal -helical domains. Its palmitoylation domain is located in the middle of the molecule that contains four cysteine residues. Mutation of the cysteines abolishes palmitoylation and membrane binding. Several elegant studies using synaptosome preparations and permeabilized PC12 cells have suggested that SNAP-25 may act in the late post-docking steps of exocytosis. By limited proteolysis and in vitro binding assay, it is proposed that the two helix domains act independently and contribute equally to form the SNARE complex with syntaxin and synaptobrevin. It seems that a major regulatory element is located in the C-terminus of SNAP-25. Removing a 9 amino acid sequence of SNAP-25 inhibited neurosecretion in chromaffin cells.

Notable Publications

Author	Pubmed ID	Journal	Application
Zi-Jun Wang	34007043	Neuropsychopharmacology	WB
Jamal B Williams	34423299	Brain Commun	WB,IF
Xing-Lian Duan	31962145	Neuroscience	WB,IHC

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:
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E: proteintech@ptglab.com
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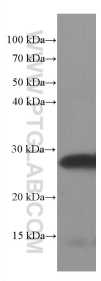
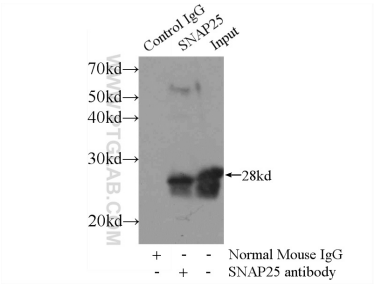
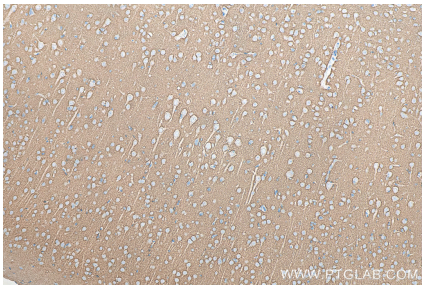
Selected Validation Data



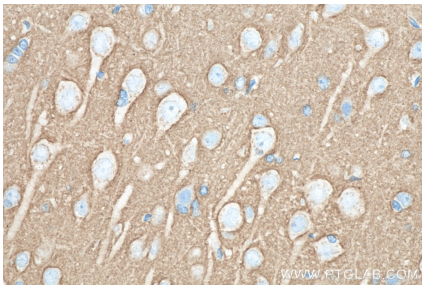
pig brain tissue were subjected to SDS PAGE followed by western blot with 60159-1-Ig (SNAP25 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



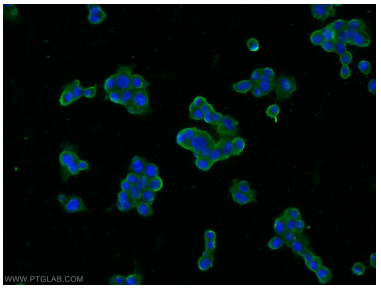
IP Result of anti-SNAP25 (IP:60159-1-Ig, 3ug; Detection:60159-1-Ig 1:500) with mouse brain tissue lysate 3600ug.



Immunohistochemical analysis of paraffin-embedded rat brain tissue slide using 60159-1-Ig (SNAP25 antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded rat brain tissue slide using 60159-1-Ig (SNAP25 antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of PC-12 cells using 60159-1-Ig (SNAP25 antibody) at dilution of 1:25 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Mouse IgG (H+L).