## For Research Use Only

## SNAP25 Recombinant antibody

Catalog Number:83259-1-RR



**Purification Method:** 

Protein A purification

Recommended Dilutions:

CloneNo.:

240069A1

**Basic Information** 

Catalog Number: GenBank Accession Number: 83259-1-RR BC010647

 Size:
 GeneID (NCBI):

 1000 ug/ml
 6616

 Source:
 UNIPROT ID:

 Rabbit
 P60880
 IHC 1:50-1:500

 Isotype:
 Full Name:
 IF/ICC 1:125-1:500

IgG synaptosomal-associated protein,

Immunogen Catalog Number: 25kDa

AG6695 Calculated MW: 23 kDa

**Applications** 

Tested Applications: IHC, IF/ICC, FC (Intra), ELISA

Species Specificity: 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:

IHC: mouse brain tissue,

IF/ICC: 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 PC 12 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. In addition, it has been shown that inhibition of neurosecretion by AX type E can be rescued by a SNAP-25 C-terminal peptide, probably by initiating the formation of a fusion competent SNARE complex.

Storage

Storage:

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

Storage Buffer:

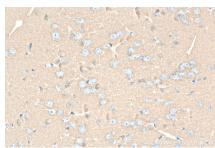
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

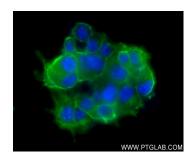
## Selected Validation Data



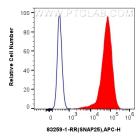
Immunohistochemical analysis of paraffinembedded mouse brain tissue slide using 83259-1-RR (SNAP25 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



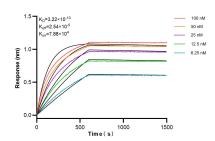
Immunohistochemical analysis of paraffinembedded mouse brain tissue slide using 83259-1-RR (SNAP25 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed PC-12 cells using SNAP antibody (83259-1-RR, Clone: 240069A1) at dilution of 1:250 and Coralite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2).



1x10^6 PC-12 cells were intracellularly stained with 0.25 ug SNAP25 Recombinant antibody (83259-1-RR, Clone:240069A1) and APC-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (red), or 0.25 ug Isotype Control (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



Biolayer interferometry (BLL) kinetic assays of 83259-1-RR against Human SNAP25 were performed. The affinity constant is 0.322 nM.