For Research Use Only

SNAP25 Recombinant monoclonal antibody

IgG

Catalog Number:83259-5-RR



Basic Information

Catalog Number: GenBank Accession Number: 83259-5-RR BC010647 Source: GeneID (NCBI): Rabbit 6616

UNIPROT ID: Isotype: P60880 Immunogen Catalog Number: Full Name:

AG6695 synaptosomal-associated protein,

25kDa

Calculated MW: 23 kDa Observed MW: 25 kDa

Purification Method: Protein A purfication

CloneNo.: 240069F12

Recommended Dilutions: WB: 1:5000-1:50000 IF/ICC: 1:125-1:500

FC (Intra): 0.25 ug per 10^6 cells in a

100 µl suspension

Applications

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

Species Specificity: human, mouse, rat

Positive Controls:

WB: PC-12 cells, mouse brain tissue, rat brain tissue

IF/ICC: PC-12 cells, SH-SY5Y cells

FC (Intra): 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 postdocking 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.

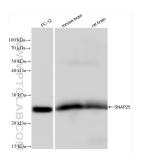
Storage

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

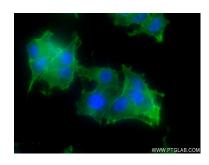
PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

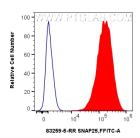
Selected Validation Data



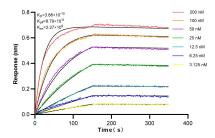
Various lysates were subjected to SDS PAGE followed by western blot with 83259-5-RR (SNAP25 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (4% PFA) fixed PC-12 cells using SNAP25 antibody (83259-5-RR, Clone: 240069F12) at dilution of 1:250 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) (SA00013-1).



1x10^6 PC-12 cells were intracellularly stained with 0.25 ug SNAP25 Recombinant monoclonal antibody (83259-5-RR, Clone:240069F12) and CoraLite@488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2)(red), or 0.25 ug Rabbit IgG Isotype Control RecAb (98136-1-RR, Clone: 240953C9) (blue). Cells were fixed and permeabilized with Intracellular Flow Cytometry Fixation & Permeabilization Buffer Kit (PF00019).



Biolayer interferometry (BLI) kinetic assays of 83259-5-RR against Human SNAP25 were performed. The affinity constant is 0.388 nM.