

For Research Use Only

# GAP43 Recombinant monoclonal antibody, PBS Only

Catalog Number:87287-1-PBS



## Basic Information

<b>Catalog Number:</b> 87287-1-PBS	<b>GenBank Accession Number:</b> BC007936	<b>Purification Method:</b> Protein A purification
<b>Source:</b> Rabbit	<b>GeneID (NCBI):</b> 2596	<b>CloneNo.:</b> 252373G2
<b>Isotype:</b> IgG	<b>UNIPROT ID:</b> P17677	
<b>Immunogen Catalog Number:</b> AG9294	<b>Full Name:</b> growth associated protein 43	
	<b>Calculated MW:</b> 238 aa, 25 kDa	
	<b>Observed MW:</b> 43-45 kDa	

## Applications

**Tested Applications:**  
WB, IHC, IF/ICC, IF-P, Indirect ELISA

**Species Specificity:**  
human, mouse, rat

## Background Information

The neuronal growth-associated protein GAP43 is known as neuromodulin, B-50, P-57, F1, and pp46. Deficiency of GAP43 in mice results in death early in the postnatal period. GAP43 is one of the main substrates for protein kinase C in the brain. GAP43 is an intracellular growth-associated protein that appears to assist neuronal pathfinding and branching during development and regeneration and may contribute to presynaptic membrane changes in the adult, leading to neurotransmitter release, endocytosis, and synaptic vesicle recycling, long-term potentiation, spatial memory formation, and learning. The predicted molecular weight of about 25 kDa is much lower than the apparent observed molecular weight of 43 kDa on SDS-PAGE gels, and this occurs because the highly charged nature of GAP43 causes it to bind less than the average amount of SDS per amino acid, and because the protein has an elongated structure.

## Storage

**Storage:**  
Store at -80°C.  
**The product is shipped with ice packs. Upon receipt, store it immediately at -80°C**

**Storage Buffer:**  
PBS only, pH7.3

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

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

## Selected Validation Data



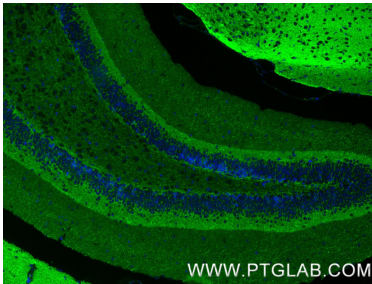
Various lysates were subjected to SDS PAGE followed by western blot with 87287-1-RR (GAP43 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 87287-1-PBS in a different storage buffer formulation.



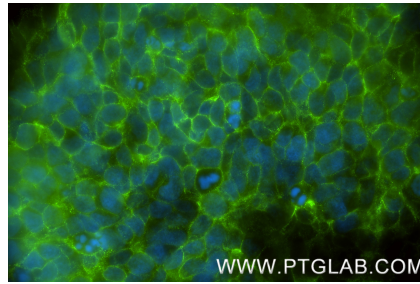
Fetal human brain tissue was subjected to SDS PAGE followed by western blot with 87287-1-RR (GAP43 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 87287-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 87287-1-RR (GAP43 antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 87287-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse brain tissue using GAP43 antibody (87287-1-RR, Clone: 252373G2 ) at dilution of 1:400 and Coralite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 87287-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed SH-SY5Y cells using GAP43 antibody (87287-1-RR, Clone: 252373G2 ) at dilution of 1:400 and Coralite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). This data was developed using the same antibody clone with 87287-1-PBS in a different storage buffer formulation.