

For Research Use Only

GAP43 Recombinant monoclonal antibody

Catalog Number:87287-1-RR



Basic Information

Catalog Number: 87287-1-RR	GenBank Accession Number: BC007936	Purification Method: Protein A purification
Source: Rabbit	GeneID (NCBI): 2596	CloneNo.: 252373G2
Isotype: IgG	UNIPROT ID: P17677	Recommended Dilutions: WB: 1:5000-1:50000 IF-P: 1:200-1:800 IF/ICC: 1:200-1:800
Immunogen Catalog Number: AG9294	Full Name: growth associated protein 43	
	Calculated MW: 238 aa, 25 kDa	
	Observed MW: 43-45 kDa	

Applications

Tested Applications:
WB, IF/ICC, IF-P, ELISA

Species Specificity:
human, mouse, rat

Positive Controls:

WB : Neuro-2a cells, fetal human brain tissue, mouse brain tissue, rat brain tissue

IF-P : mouse brain tissue,

IF/ICC : SH-SY5Y cells,

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

Storage Buffer:

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

Aliquoting is unnecessary for -20°C storage

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.

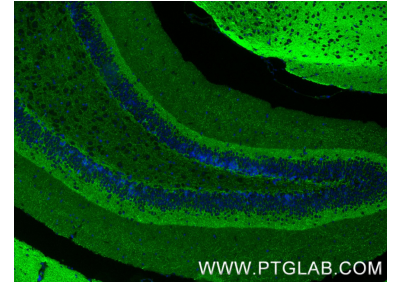
Selected Validation Data



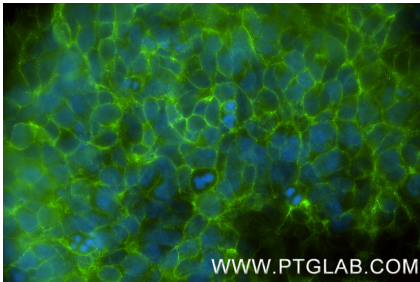
Various lysates were subjected to SDS PAGE followed by western blot with 87287-1-RR (GAP43 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



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.



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).



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).