

CoraLite® Plus 488-conjugated GAP43

Recombinant monoclonal antibody

Catalog Number: CL488-87287

Basic Information

Catalog Number:

CL488-87287

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG9294

GenBank Accession Number:

BC007936

GeneID (NCBI):

2596

UNIPROT ID:

P17677

Full Name:

growth associated protein 43

Calculated MW:

238 aa, 25 kDa

Observed MW:

43-45 kDa

Purification Method:

Protein A purification

CloneNo.:

252373G2

Recommended Dilutions:

IF-P: 1:50-1:500

Excitation/Emission maxima wavelengths:

493 nm / 522 nm

Applications

Tested Applications:

IF-P

Species Specificity:

human, mouse, rat

Positive Controls:

IF-P: mouse brain tissue,

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:

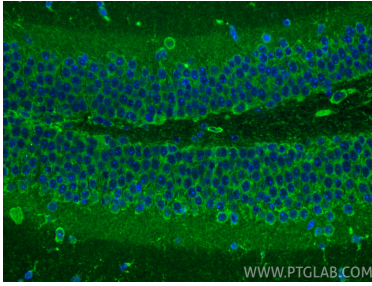
Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

Storage Buffer:

PBS with 50% glycerol, 0.05% Proclin300, 0.5% BSA, pH7.3

Aliquoting is unnecessary for -20°C storage

Selected Validation Data



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse brain tissue using CoraLite® Plus 488 GAP43 antibody (CL488-87287, Clone: 252373G2) at dilution of 1:200. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).