

Basic Information

Product Name	Anti-GAP43 Antibody	
Gene Name	GAP43	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human, mouse, rat	
Tested Application	WB, IHC, IF, FCM	
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.	
Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human GAP43, which shares 95.2% amino acid (aa) sequence identity with both mouse and rat GAP43.	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	43 kDa	
Dilution Ratios	Western blot (WB): 1:500-2000 Immunofluorescence (IF): 1:50~1:400 Flow Cytometry (Fixed): 1:50-200 Immunohistochemistry (IHC): 1:50-400 (Boiling the paraffin sections in 10mM citrate buffer, pH6.0, or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

Storage

12 months from date of receipt, -20°C as supplied.

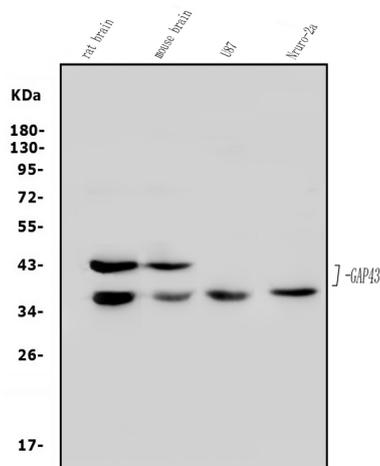
Background Information

Growth Associated Protein 43 (GAP43) is a protein encoded by the GAP43 gene in humans. It is mapped to 3q13.31. The protein encoded by this gene has been termed a 'growth' or 'plasticity' protein because it is expressed at high levels in neuronal growth cones during development and axonal regeneration. This protein is considered a crucial component of an effective regenerative response in the nervous system. Alternatively spliced transcript variants encoding distinct isoforms have been found for this gene.

Reference

Anti-GAP43 Antibody被引用在2文献中。

Selected Validation Data



Western blot analysis of GAP43 using anti-GAP43 antibody (A01868). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: rat brain tissue lysates,

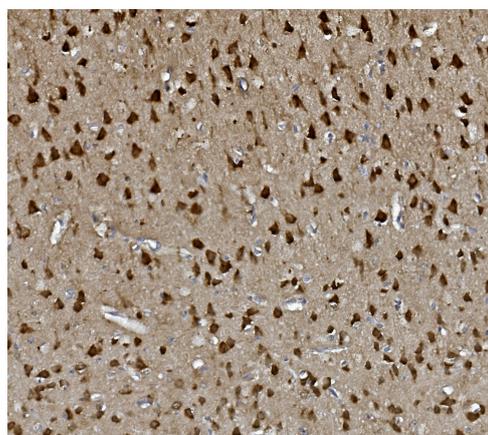
Lane 2: mouse brain tissue lysates,

Lane 3: human U87 whole cell lysates,

Lane 4: mouse Neuro-2a whole cell lysates.

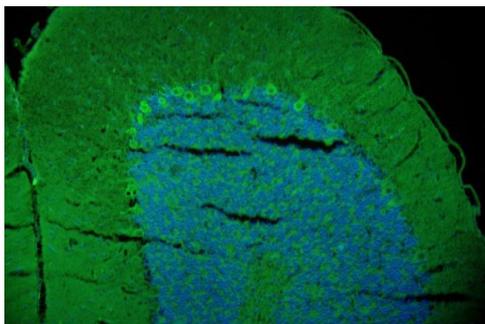
After electrophoresis, proteins were transferred to a membrane.

Then the membrane was incubated with rabbit anti-GAP43 antigen affinity purified polyclonal antibody (A01868) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for GAP43 at approximately 43 kDa. The expected band size for GAP43 is at 25 kDa.

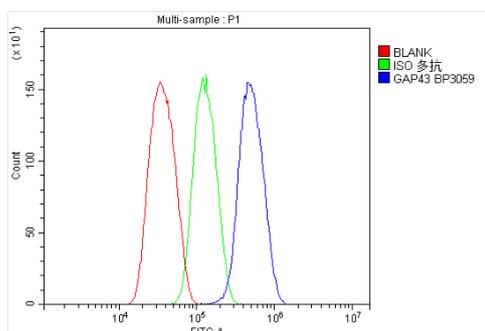


IHC analysis of GAP43 using anti-GAP43 antibody (A01868).

GAP43 was detected in a paraffin-embedded section of rat brain tissue. Biotinylated goat anti-rabbit IgG was used as secondary antibody. The tissue section was incubated with rabbit anti-GAP43 Antibody (A01868) at a dilution of 1:200 and developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB (Catalog # AR1027) as the chromogen.



IF analysis using anti- GAP43 antibody (A01868). detected in paraffin-embedded section of rat brain tissue. The tissue section were stained using the Fluoro488-conjugated Anti-rabbit IgG Secondary Antibody (green)(Catalog # BA1127) and counterstained with DAPI (blue).



Flow Cytometry analysis of HepG2 cells using anti-GAP43 antibody (A01868).

Overlay histogram showing HepG2 cells stained with A01868 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-GAP43 Antibody (A01868) at 1:100 dilution for 30 min at 20°C. Fluoro488 conjugated goat anti-rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.