

Product Name: KD-Validated Growth Associated Protein 43 Recombinant Rabbit Monoclonal Antibody

Catalog #: KVAAb00793

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC,IHC-P
Reactivity	Human
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1,000-1:50,000; FC 1:200-1:2,000; ICC 1:100-1:1,000; IHC-P 1:100-1:200
Molecular Weight	Calculated MW: 24.8kDa

Antigen Information

Gene Name	GAP43
Alternative Names	GAP43; Growth Associated Protein 43; Axonal Membrane Protein GAP-43; Neural Phosphoprotein B-50; Neuromodulin; GAP-43; B-50; PP46; Neuron Growth-Associated Protein 43; Nerve Growth-Related Peptide GAP43; Calmodulin-Binding Protein P-57; Protein F1; Growth-Associated Protein 43; Pp46
Gene ID	2596.0
SwissProt ID	P17677
Immunogen	A synthesized peptide derived from human GAP43

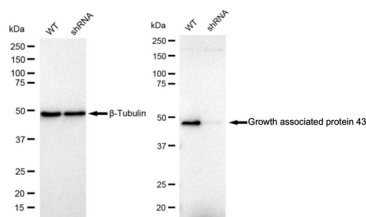
Background

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. [provided by RefSeq, Jul 2008]

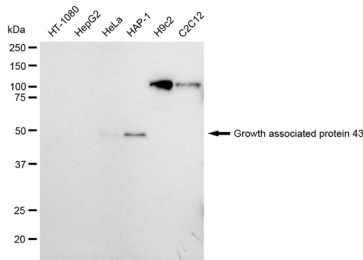
Research Area

Neuroscience

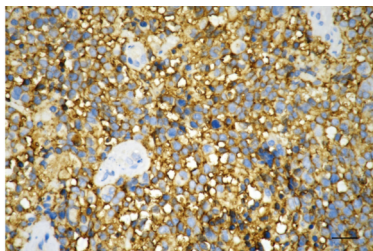
Image Data



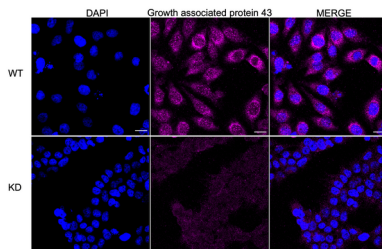
Western blotting analysis using growth associated protein 43 antibody (KVA00793). Growth associated protein 43 expression in wild type (WT) and growth associated protein 43 (GAP43) shRNA knockdown (KD) HeLa cells with 30 μ g of total cell lysates. β -Tubulin serves as a loading control. The blot was incubated with growth associated protein 43 antibody (KVA00793, 1:50,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



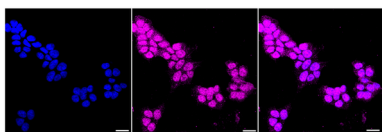
Western blotting analysis using Growth associated protein 43 antibody (KVA00793). Total cell lysates (30 μ g) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with Growth associated protein 43 antibody (KVA00793, 1:50,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



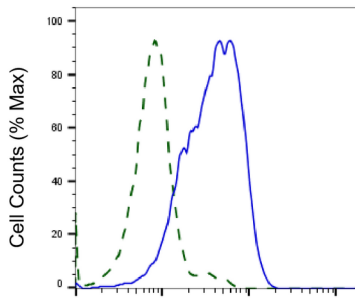
Immunohistochemistry was performed on paraffin-embedded human glioblastoma using growth associated protein 43 antibody (KVA00793, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40 $\times$ objective). Scale bar: 25 μ m.



Immunocytochemical staining of HeLa cells using growth associated protein 43 antibody (KVA00793, 1:1,000), Top panel: wild-type (WT); Bottom panel: growth associated protein 43 shRNA knockdown (KD). Nuclei were stained blue with DAPI; Growth associated protein 43 was stained magenta with Alexa Fluor® 647. Scale bar, 20 μ m. Permeabilization: Triton.

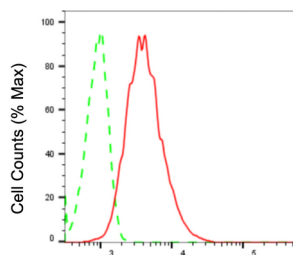


Immunocytochemical staining of HAP-1 cells with Growth associated protein 43 antibody (KVA00793, 1:1,000). Nuclei were stained blue with DAPI; Growth associated protein 43 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar: 20 μ m.



Growth associated protein 43-Alexa
Fluor® 647

Validation of Growth associated protein 43 knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HeLa cells were stained with Growth associated protein 43 antibody (KVA00793, 1:2,000) and analyzed using CytoFLEX.



Growth associated protein 43-Alexa Fluor® 647

Flow cytometric analysis of growth associated protein 43 expression in HAP-1 cells using growth associated protein 43 antibody (KVA00793, 1:2,000). Green, isotype control; red, growth associated protein 43.