

GAP43 Polyclonal Antibody

Product Details	
Size	100 µL
Species Reactivity	Bovine, Dog, Chicken, Fruit fly, Horse, Human, Mouse, Non-human primate, Pig, Rat
Published Species	Mouse
Host/Isotype	Rabbit / IgG
Class	Polyclonal
Type	Antibody
Conjugate	Unconjugated
Immunogen	Synthetic peptide, coupled to maleimide-activated KLH, corresponding to residues (C) K(216) E D P E A D Q E H A(226) of rat/mouse GAP-43.
Form	Liquid
Concentration	1 mg/mL
Purification	Antigen affinity chromatography
Storage buffer	PBS with 50% glycerol
Contains	5mM sodium azide
Storage conditions	-20° C, Avoid Freeze/Thaw Cycles
RRID	AB_568546

Applications	Tested Dilution	Publications
Western Blot (WB)	1:10,000	-
Immunohistochemistry (IHC)	-	1 Publication
Immunohistochemistry (Paraffin) (IHC (P))	1-2 µg/mL	-
Immunohistochemistry (Frozen) (IHC (F))	1-2 µg/mL	-
Immunocytochemistry (ICC/IF)	1:1,000	1 Publication
Flow Cytometry (Flow)	Assay-Dependent	-

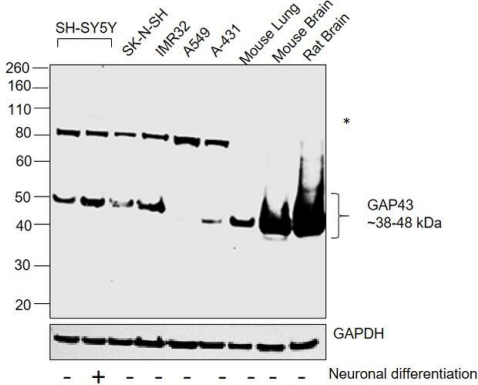
Product Specific Information

Suggested positive control: embryonic nervous tissue, brain, injured nerve.

Product Images For GAP43 Polyclonal Antibody

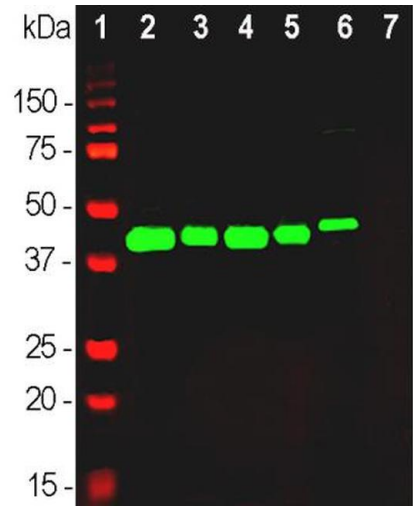
GAP43 Antibody (PA1-16729) in WB

Western blot was performed using Anti-GAP43 Polyclonal Antibody (Product # PA1-16729) and a 38-48 kDa band corresponding to GAP43 was observed across cell lines and tissues tested except in A549, A-431 and Mouse Lung which are reported to be low to negative for GAP43 expression. An increase in GAP43 expression was observed in SH-SY5Y on neuronal differentiation. Membrane enriched extracts (30 µg lysate) of SH-SY5Y (Lane 1), SH-SY5Y differentiated to neurons (Lane 2), SK-N-SH (Lane 3), IMR-32 (Lane 4), A549 (Lane 5), A-431 (Lane 6), Mouse Lung (Lane 7), Mouse Brain (Lane 8) and Rat Brain (Lane 9) were electrophoresed using NuPAGE™ 4-12% Bis-Tris Protein Gel (Product # NP0322BOX). Resolved proteins were then transferred onto a Nitrocellulose membrane (Product # IB23002) by iBlot® 2 Dry Blotting System (Product # IB21001). The blot was probed with the primary antibody (1 µg/mL) and detected by chemiluminescence with Goat anti-Rabbit IgG (Heavy Chain) Superclonal™ Recombinant Secondary Antibody, HRP (Product # A27036, 1:4,000 dilution) using the iBright FL 1000 (Product # A32752). Chemiluminescent detection was performed using Novex® ECL Chemiluminescent Substrate Reagent Kit (Product # WP20005).



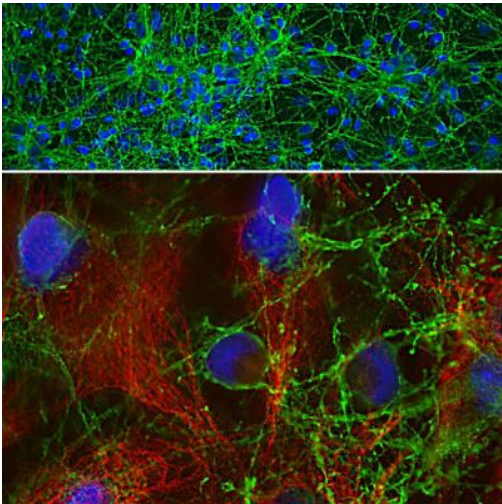
GAP43 Antibody (PA1-16729) in WB

Western blot analysis of GAP43 in different tissue and cell lysates. Samples were incubated in GAP43 polyclonal antibody (Product # PA1-16729 using a dilution of 1:20,000. Antibody in green: [1] protein standard (red), [2] rat brain, [3] rat spinal cord, [4] mouse brain, [5] mouse spinal cord, [6] SH-SY5Y cells, [7] C6 cells. Single band at 43 kDa mark corresponds to GAP43 protein. The GAP43 protein is detected only in the lysates of neuronal origin. C6 cells are a rat glioma cell line and do not express GAP43 protein.



GAP43 Antibody (PA1-16729) in ICC/IF

Immunocytochemistry analysis of GAP43 in Cortical neuron-glia cell culture from E20 rat. Samples were incubated in GAP43 polyclonal antibody (Product # PA1-16729) using a dilution of 1:2000. This antibody in green, and costained with mouse mAb to vimentin, dilution 1:2,000, in red. Blue: DAPI staining of nuclear DNA. GAP43 antibody labels protein expressed in the axonal membrane of neuronal cells, while vimentin antibody stains intermediate filaments in fibroblasts and other non-neuronal cells.



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Immunohistochemistry (1)

Cell reports	Year 2022
Identification of distinct non-myogenic skeletal-muscle-resident mesenchymal cell populations.	Species Mouse
"PA1-16729 was used in Immunohistochemistry-immunofluorescence to identify six distinct Pdgfra+ non-myogenic muscle-resident mesenchymal cell populations that fit within a bipartite differentiation trajectory from a common progenitor."	
Authors: Leinroth AP,Mirando AJ,Rouse D,Kobayahsi Y,Tata PR,Rueckert HE,Liao Y,Long JT,Chakkalakal JV,Hilton MJ	

Immunocytochemistry (1)

Cell death & disease	Year 2022
Loss of CASZ1 tumor suppressor linked to oncogenic subversion of neuroblastoma core regulatory circuitry.	
"Published figure using GAP43 polyclonal antibody (Product # PA1-16729) in Immunocytochemistry"	
Authors: Liu Z,Zhang X,Xu M,Lei H,Shern JF,Thiele CJ	

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