Datasheet for ABIN361379

anti-GFAP antibody

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Overview

Quantity:	100 µL
Target:	GFAP
Reactivity:	Cow
Host:	Chicken
Clonality:	Polyclonal
Conjugate:	This GFAP antibody is un-conjugated
Application:	Western Blotting (WB), Immunofluorescence (IF)

Product Details

Immunogen:	Recombinant and purified bovine GFAP
Specificity:	Specific for the ~50kDa GFAP protein. A lower band at ~45kDa is a proteolytic fragment derived from the GFAP molecule. It is expected that the antibody will react with other mammalian tissues.
Cross-Reactivity:	Rat (Rattus)
Predicted Reactivity:	human, mouse
Purification:	Total IgY fraction

Target Details

Target:	GFAP
Alternative Name:	GFAP (GFAP Products)

Target Details

Background:	Glial Fibrillary Acidic Protein (GFAP) was discovered by Amico Bignami and co-workers as a major fibrous protein of multiple sclerosis plaques (1). It was subsequently found to be a member of the 10nm or intermediate filament (IF) family, specifically the IF family Class III, which also includes peripherin, desmin and vimentin. GFAP is strongly and specifically expressed in astrocytes and certain other astroglia in the CNS, in satellite cells, peripheral ganglia, and in non-myelinating Schwann cells in peripheral nerves. In many damage and disease states GFAP expression is heavily upregulated in astrocytes. In addition, neural stem cells frequently strongly express GFAP. Point mutations in the protein coding region of the GFAP gene lead to Alexander disease which is characterized by the presence of abnormal astrocytes containing GFAP protein aggregates known as Rosenthal fibers (2). Anti-GFAP Left: Western blot of rat cortex lysate showing specific immunolabeling of the ~ 50k GFAP protein. Right: Mixed cultures of neurons and glia stained with chicken anti-GFAP (red), and DNA (blue). Astrocytes stain strongly and specifically in a clearly filamentous fashion with this antibody.
Molecular Weight:	'50 kDa
Gene ID:	281189
UniProt:	Q28115

Application Details

Application Notes:	Recommended Dilution: WB: 1:10,000 IF: 1:1,000 Quality Control: Western blots performed on each lot.
Restrictions:	For Research Use only

Handling

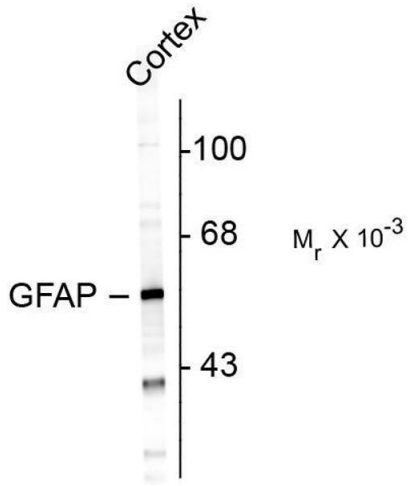
Format:	Liquid
Buffer:	total IgY fraction in PBS + 10 mM Sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C

Publications

Product cited in:	Levenga, Wong, Milstead, Keller, LaPlante, Hoeffer: "AKT isoforms have distinct hippocampal

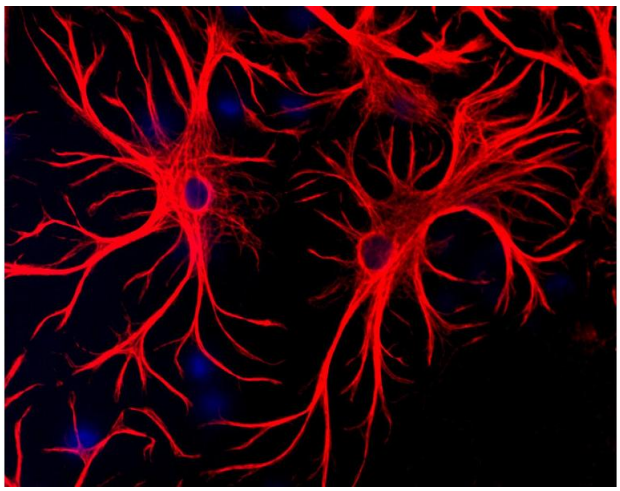
expression and roles in synaptic plasticity." in: **eLife**, Vol. 6, (2018) (PubMed).

Images



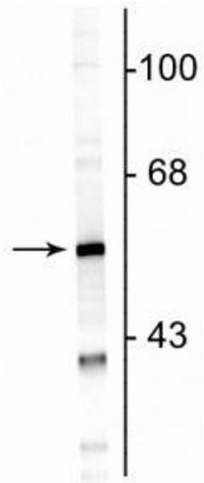
Western Blotting

Image 1. Western blots of rat cortex lysate showing specific immunolabeling of the ~ 50k GFAP protein.



Immunocytochemistry

Image 2. Mixed cultures of neurons and glia stained with chicken anti-GFAP (red), and DNA (blue). Astrocytes stain strongly and specifically in a clearly filamentous fashion with this antibody.



Western Blotting

Image 3. Western blot of rat cortical lysate showing specific immunolabeling of the ~50 kDa GFAP protein.