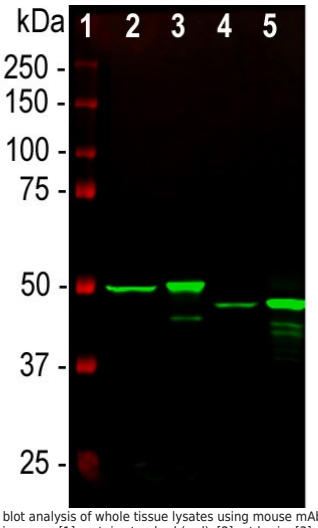
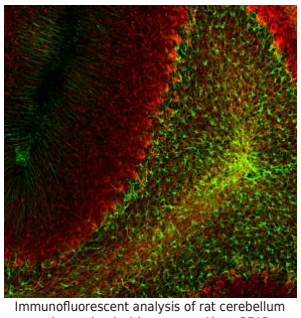
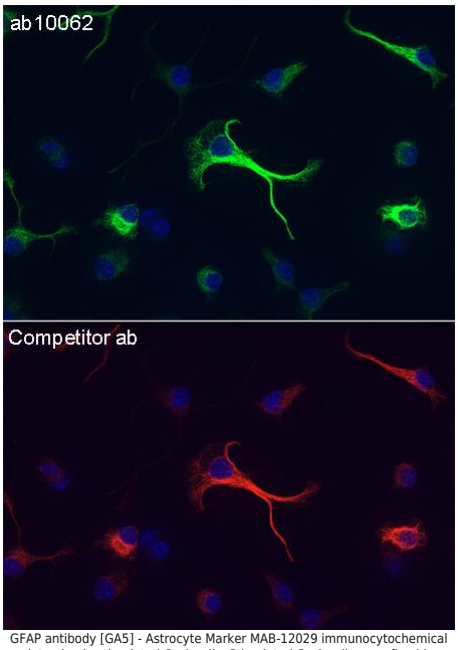
Product name:	GFAP Mouse Monoclonal Antibody
Cat number:	MAB-12029
Conjugate:	Unconjugated
Size:	100 ug
Clone:	GA5
Concentration:	1mg/ml
Host:	Mouse
Isotype:	IgG1
Immunogen:	Purified porcine spinal cord GFAP
Reactivity:	Hu, Pig, Ch, Rt, Ms
Applications:	Western blot: 1:500 - 1:1000 Immunohistochemistry (Paraffin embedded tissues):1:500 Immunohistochemistry (Frozen Tissues) 1:500 - 1,000 Immunofluorescence : 1: :500 – 1: 1,000 Immunocytochemistry: 1: 500 – 1: 1,000
Molecular Weight:	50kDa
Purification:	Purified
Form:	Liquid
Buffer:	Liquid in PBS 50% glycerol, 5 mM Sodium Azide
Storage:	At 4°C short term or -20°C long term. Avoid repeated freezing and thawing
Background:	Glial Fibrillary Acidic Protein (GFAP) was discovered by Amico Bignami and coworkers as a major fibrous protein of multiple sclerosis plaques (1). It was subsequently found to be a member of the 10nm or intermediate filament protein family, specifically the intermediate filament protein family Class III, which also includes peripherin, desmin and vimentin. The GFAP protein runs on gels as a ~50kDa protein, usually associated with somewhat lower molecule weight bands which are alternate transcripts from the single gene. The HGNC nomenclature for this protein is, perhaps not surprisingly, GFAP. GFAP is strongly and specifically expressed in astrocytes and certain other astroglia in the central nervous system, in satellite cells in peripheral ganglia, and in non-myelinating Schwann cells in peripheral nerves (2,3). It is also a component of neural stem cells.



Western blot analysis of whole tissue lysates using mouse mAb to GFAP, dilution 1:1,000, in green: [1] protein standard (red), [2] rat brain, [3] rat spinal cord, [4] mouse brain, [5] mouse spinal cord. The strong band at about 50kDa corresponds to the GFAP protein



Immunofluorescent analysis of rat cerebellum section stained with mouse mAb to GFAP, dilution 1:1,000, in green, costained with rabbit pAb to neurofilament NF-L dilution 1:1,000, in red. Following transcardial perfusion with 4% paraformaldehyde, brain was post fixed for 24 hours, cut to 45µM, and free-floating sections were stained with antibodies. MAB-12029 stains a network of astroglial cells, while the NF-L antibody labels neuronal cells and their processes.



GFAP antibody [GA5] - Astrocyte Marker MAB-12029 immunocytochemical detection in stimulated Cor1 cells. Stimulated Cor1 cells were fixed in formaldehyde, permeabilized, blocked in 1% BSA for 10 mins @ rt°C. Primary Antibody MAB-12029 incubated at 1/1500 for 2 hours in TBS/BSA/azide/0.3% triton. Secondary Antibody: anti mouse IgG Conjugated to: Alexa Fluor® 488 (1/1000).