NEUROMICS

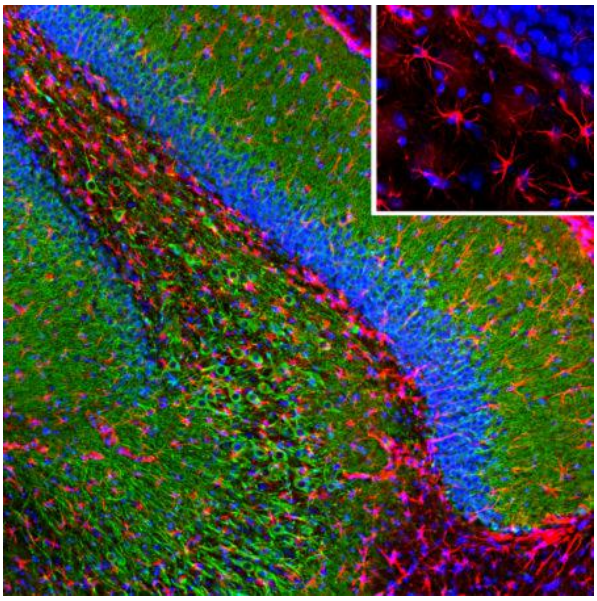
GFAP Data Sheet

Catalog Number:	MO22205	**Host:**	Mouse
Product Type:	Mouse Monoclonal IgG1	**Species Reactivity:**	Human, Rat, Mouse, Cow, Pig
Immunogen Sequence:	Recombinant human alpha-helical GFAP fragment expressed in and purified from *E. coli*	**Format:**	Purified at 1mg/mL in PBS, 50% glycerol, 5mM NaN3
Applications:	Immunofluorescence: 1:500 Immunohistochemistry: 1:500 Western Blot: 1:1,000		
Storage:	Dilutions listed as a recommendation. Optimal dilution should be determined by investigator. Antibody can also be aliquotted and stored frozen at -20° C in a manual defrost freezer for six months without detectable loss of activity. The antibody can be stored at 2° - 8° C for 1 month without detectable loss of activity. Avoid repeated freeze-thaw cycles.		

Application Notes

Description/Data

Glial fibrillary acidic protein (GFAP) is strongly and specifically expressed in astrocytes, Bergmann glia, certain other glia in the central nervous system, in satellite cells in peripheral ganglia, and in non-myelinating Schwann cells in peripheral nerves. GFAP expression is also seen in developing neural stem cells and GFAP levels may greatly increase in regions of CNS injury or disease. The formation of a GFAP rich “glial scar” following CNS injury may be one reason why reconnection of severed processes is relatively inefficient in adults.



This antibody was made against a recombinant construct containing amino acids 71-217 of the human isotype 1 sequence in NP_002046.1. This region is somewhat variable between species so antibodies to this human construct may be superior on human cells, tissues and for biomarker assays of human proteins. MO22205 has a KD of 6.157 X 10-10M. High quality antibodies to GFAP, like MO22205, are useful for visualizing glia and monitoring developmental, disease and damage related CNS alterations and for ELISA and bead based type assays.

Image: Immunofluorescent analysis of rat hippocampus section stained with mouse mAb to GFAP, MO22205, dilution 1:500 in red, and costained with chicken pAb to MAP2, dilution 1:5,000, in green. The blue is Hoechst staining of nuclear DNA. Following transcardial perfusion of rat with 4% paraformaldehyde, brain was post fixed for 24 hours, cut to 45µM, and free-floating sections were stained with above antibodies.

FOR RESEARCH USE ONLY

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