

**GFAP R416WT Antibody**  
**GFAP R416WT Antibody, Clone S206B-9**  
**Catalog # ASM10276****Specification**

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**GFAP R416WT Antibody - Product Information**

Application	<b>WB</b>
Primary Accession	<a href="#">P14136</a>
Other Accession	<a href="#">NP_001124491.1</a>
Host	<b>Mouse</b>
Isotype	<b>IgG1</b>
Reactivity	<b>Human, Mouse, Rat</b>
Clonality	<b>Monoclonal</b>

**Description**

Mouse Anti-Human GFAP R416WT Monoclonal IgG1

**Target/Specificity**

Detects ~50kDa. Does not cross-react with GFAP-R416W or other proteins (based on KO validation results).

**Other Names**

Glial fibrillary acidic protein Antibody, Intermediate filament protein Antibody, Astrocyte Antibody, gfapl Antibody, DKFZp459C0729 Antibody, MGC139638 Antibody, FLJ45472 Antibody, AI836096 Antibody, GFAP Antibody

**Immunogen**

Synthetic peptide amino acids 411-422 (KTVEMRDGEVIK) of human GFAP; 100% identical in rat and mouse. >50% identity with other proteins (Vimentin, Desmin and Peripherin).

**Purification**

Protein G Purified

Storage **-20°C**

**Storage Buffer**

PBS pH 7.4, 50% glycerol, 0.1% sodium azide

Shipping Temperature

**Blue Ice or 4°C**

**Certificate of Analysis**

1 µg/ml of SMC-442 was sufficient for detection of GFAP R416WT in 20 µg of rat brain lysate by colorimetric immunoblot analysis using Goat anti-mouse IgG:HRP as the secondary antibody.

**Cellular Localization**

Cytoplasm

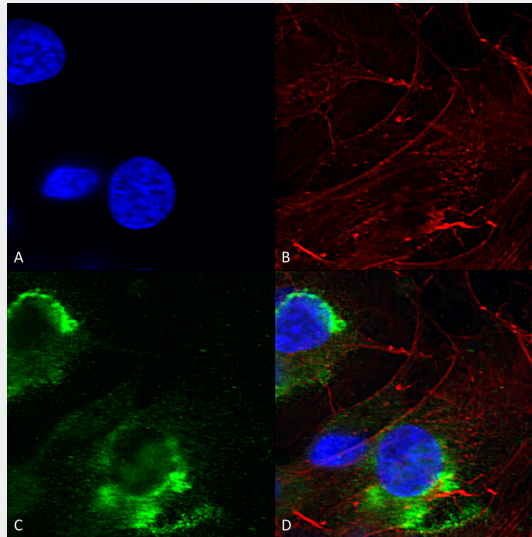
**GFAP R416WT Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

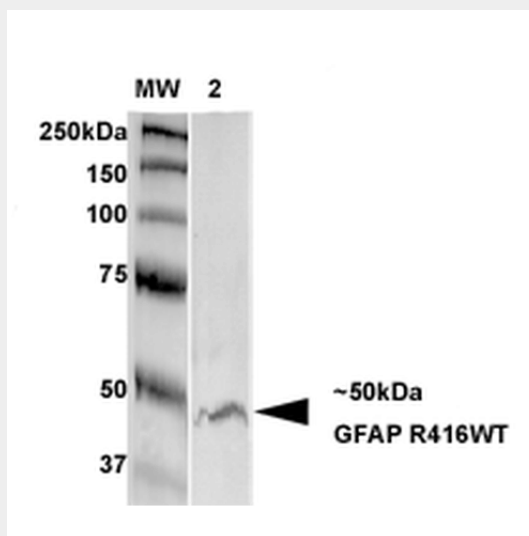
- [Western Blot](#)

- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### GFAP R416WT Antibody - Images



Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-GFAP R416WT Monoclonal Antibody, Clone N206B/9 (ASM10276). Tissue: Neuroblastoma cells (SH-SY5Y). Species: Human. Fixation: 4% PFA for 15 min. Primary Antibody: Mouse Anti-GFAP R416WT Monoclonal Antibody (ASM10276) at 1:200 for overnight at 4°C with slow rocking. Secondary Antibody: AlexaFluor 488 at 1:1000 for 1 hour at RT. Counterstain: Phalloidin-iFluor 647 (red) F-Actin stain; Hoechst (blue) nuclear stain at 1:800, 1.6mM for 20 min at RT. (A) Hoechst (blue) nuclear stain. (B) Phalloidin-iFluor 647 (red) F-Actin stain. (C) GFAP R416WT Antibody (D) Composite.



Western Blot analysis of Rat Brain Membrane showing detection of GFAP protein using Mouse Anti-GFAP Monoclonal Antibody, Clone N206B/9 (ASM10276). Primary Antibody: Mouse Anti-GFAP Monoclonal Antibody (ASM10276) at 1:250.

## **GFAP R416WT Antibody - Background**

The 50 kDa type III intermediate filament protein glial fibrillary acidic protein (GFAP) is a major structural component of astrocytes. GFAP associates with the calcium binding protein annexin II-p2 and S-100. Association with these proteins together with phosphorylation regulates GFAP polymerization. Astrocytes respond to brain injury by proliferating (astrogliosis), and one of the first events to occur during astrocyte proliferation is increased GFAP expression. Interestingly, antibodies to GFAP have been detected in individuals with dementia.

## **GFAP R416WT Antibody - References**

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4. Trojanowski JQ et al. (1986) *J. Neurochem*. 6(3): 650-660 (1986).
5. Schmidt ML et al; *Lab Invest* 56:282-294 (1987).
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8. Mokuna, K, et al; *J Neurosci Res* 23:396 (1989).
9. Molenaar, et al; *Exp Neurology* 108:1-9 (1990).
10. Tohyama T et al; *Am J Pathol*, 142:871-882 (1993).
11. Tohyama T et al; *Am J Pathol* 142:883-892 (1993).
12. Thilenius, A.R.B., et al; *J. Immunol*. 162(2): 643-650 (1999).