

Store at
-20°C

#47084

GFAP (D1F4Q) XP[®] Rabbit mAb (Biotinylated)

Cell Signaling
TECHNOLOGY[®]Support: +1-978-867-2388 (U.S.)
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orders@cellsignal.comEntrez-Gene ID #2670
UniProt ID #P14136

New 07/17

For Research Use Only. Not For Use In Diagnostic Procedures.

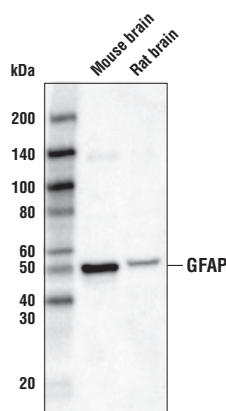
Applications W Endogenous	Species Cross-Reactivity H, M, R	Molecular Wt. 50 kDa	Isotype Rabbit IgG
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Description: This Cell Signaling Technology antibody is conjugated to biotin under optimal conditions. The biotinylated antibody is expected to exhibit the same species cross-reactivity as the unconjugated GFAP (D1F4Q) XP[®] Rabbit mAb #12389.

Background: The cytoskeleton consists of three types of cytosolic fibers: microfilaments (actin filaments), intermediate filaments, and microtubules. Major types of intermediate filaments are specifically expressed in particular cell types: cytokeratins in epithelial cells, glial fibrillary acidic protein (GFAP) in glial cells, desmin in skeletal, visceral, and certain vascular smooth muscle cells, vimentin in cells of mesenchymal origin, and neurofilaments in neurons. GFAP and vimentin form intermediate filaments in astroglial cells and modulate their motility and shape (1). In particular, vimentin filaments are present at early developmental stages, while GFAP filaments are characteristic of differentiated and mature brain astrocytes. Thus, GFAP is commonly used as a marker for intracranial and intraspinal tumors arising from astrocytes (2). In addition, GFAP intermediate filaments are also present in nonmyelin-forming Schwann cells in the peripheral nervous system (3).

Specificity/Sensitivity: GFAP (D1F4Q) XP[®] Rabbit mAb (Biotinylated) recognizes endogenous levels of total GFAP protein.

Source/Purification: Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Asp395 of human GFAP protein.



Western blot analysis of extracts from mouse brain and rat brain using GFAP (D1F4Q) XP[®] Rabbit mAb (Biotinylated).

Storage: Supplied in 136 mM NaCl, 2.6 mM KCl, 12 mM sodium phosphate (pH 7.4) dibasic, 2 mg/ml BSA, and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

Biotinylated antibodies are designed to be detected using streptavidin or anti-biotin antibody conjugates.

Recommended Antibody Dilutions:

Western blotting 1:1000

For product specific protocols and a complete listing of recommended companion products please see the product web page at www.cellsignal.com
Background References:

- (1) Eng, L.F. et al. (2000) *Neurochem. Res.* 25, 1439-51.
- (2) Goebel, H.H. et al. (1987) *Acta. Histochem. Suppl.* 34, 81-93.
- (3) Jessen, K.R. et al. (1990) *Development* 109, 91-103.

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IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v nonfat dry milk, 1X TBS, 0.1% Tween[®]20 at 4°C with gentle shaking, overnight.

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Applications: W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA-Peptide Species Cross-Reactivity: H—human M—mouse R—rat Hm—hamster Mk—monkey Mi—mink C—chicken Dm—D. melanogaster X—Xenopus Z—zebrafish B—bovine Dg—dog Pg—pig Sc—S. cerevisiae Ce—C. elegans Hr—Horse All—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.