Rabbit antibody to Glial Fibrillary Acidic Protein (GFAP): IgG

Catalogue No.:	R-164-250
Description:	THIS PRODUCT HAS BEEN SUPERCEDED. PLEASE REFER TO THE "REPLACED BY" FIELD BELOW TO LOCATE THE CURRENT BIOSENSIS PRODUCT TO MEET YOUR RESEARCH NEEDS. GFAP is a 50 kDa intra-cytoplasmic filamentous protein of the cytoskeleton in astrocytes, and it has demonstrated to be the most specific marker for cells of astrocytic origin. FUNCTION: GFAP, a class-III intermediate filament, is a cell-specific marker that, during the development of the central nervous system, distinguishes astrocytes from other glial cells. GFAP immunoreactivity has been shown in immature oligodendrocytes , epiglottic cartilage, pituicytes, papillary meningiomas, myoepithelial cells of the breast and in non-CNS: Schwann cells, salivary gland neoplasms, enteric glia cells, and metastasizing renal carcinomas. SUBCELLULAR LOCATION: Cytoplasm. Note: Associated with intermediate filaments. ALTERNATIVE PRODUCTS: 3 named isoforms produced by alternative splicing. Isoforms differ in the C-terminal region which is encoded by alternative exons. DISEASE: Defects in GFAP are a cause of Alexander disease. Alexander disease is a rare disorder of the central nervous system. It is a progressive leukoencephalopathy whose hallmark is the widespread accumulation of Rosenthal fibers which are cytoplasmic inclusions in astrocytes. The most common form affects infants and young children, and is characterized by progressive failure of central myelination, usually leading to death within the first decade. Patients with juvenile or adult forms typically experience ataxia, bulbar signs and spasticity, and a more slowly progressive course.
Replaced by:	R-1374-50
Batch No.:	See product label
Unit size:	250 Âµg
Antigen:	Native GFAP extracted from rat spinal cord
Other Names:	Glial fibrillary acidic protein; astrocyte
Accession:	GFAP_HUMAN GFAP_MOUSE GFAP_RAT GFAP_BOVINE
Produced in:	Rabbit
Purity:	Protein G purified IgG
Applications:	IHC. A dilution of 1:500-1:1000 is recommended. This antiserum works superbly for staining of paraffin-embedded tissue sections fixed in formalin, frozen sections and cell cytospins. Proteinase-K pre-treatment of tissues has been shown to produce most specific pattern of staining with negligible background. Occasionally, antigen retrieval by microwave (heat retrieval of the epitope) can produce some non-specific staining. Biosensis recommends optimal dilutions/concentrations should be determined by the end user.
Specificity:	This antibody is specific for GFAP shown by IHC and ELISA.
Cross-reactivity:	Human, mouse, rat and cow and expected to react to GFAP protein of origins of cat, dog and

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	sheep
Form:	Lyophilised
Reconstitution:	Reconstitute in 250 Âµl of sterile water. This will result in a concentration of 1 mg/ ml. Centrifuge to remove any insoluble material.
Storage:	After reconstitution keep aliquots at -20Â°C for a higher stability, and at 4Â°C with an appropriate antibacterial agent. Avoid repetitive freeze/thaw cycles. Glycerol (1:1) may be added for an additional stability.
Expiry Date:	12 months after purchase
References:	1. Reeves S.A, et al. Proc. Natl. Acad. Sci. U.S.A. 86:5178-5182(1989). 2. Brenner M, et al. Brain Res. Mol. Brain Res. 7:277-286(1990). 2. Isaacs A, et al. Genomics 51:152-154(1998). 3. Ota T, et al. Nat. Genet. 36:40-45(2004). 4. Nielsen A.L, et al. J. Biol. Chem. 277:29983-29991(2002). 5. Singh R, et al. Genomics 82:185-193(2003). 6. Brenner M, et al. Nat. Genet. 27:117-120(2001). 7. Brockmann K, et al. Eur. Neurol. 50:100-105(2003). 8. Stumpf E, et al. Arch. Neurol. 60:1307-1312(2003). 9. Sawaishi Y, et al. Neurology 58:1541-1543(2002). 10. Aoki Y, et al. Neurosci. Lett. 312:71-74(2001).

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