GFAP

Format	Catalog No.	Pack size	Dilution
Concentrated	G2255 A, B, C	0.1, 0.5, 1.0 mL	1:100
Prediluted	G2255 AA, BB	6.0, 3.0 mL	Ready to use

PRODUCT DESCRIPTION –

This antibody detects a protein of ~50kDa which is identified as Glial Fibrillary Acidic Protein (GFAP). It doesn't interact with other proteins in the intermediate filament. Astroglia are the only cells that contain GFAP. In the central nervous system, GFAP is a widely used marker for identifying glial-derived neoplasia cells and benign astrocytes. This GFAP antibody is helpful in identifying astrocytic differentiation in tumours outside of the central nervous system and in distinguishing original gliomas from brain metastases.

INTENDED USE –

GFAP (Astrocyte & Neural Stem Cell Marker) is a mouse monoclonal antibody that is intended for laboratory use in the qualitative identification of GFAP by immunohistochemistry (IHC) in formalin-fixed paraffin-embedded (FFPE) human tissues. The clinical interpretation of any staining or its absence should be complemented by morphological studies using proper controls and should be evaluated within the context of the patient's clinical history and other diagnostic tests by a qualified pathologist.

SUMMARY AND EXPLANATION –

This antibody detects a protein of ~50kDa which is identified as Glial Fibrillary Acidic Protein (GFAP). It doesn't interact with other proteins in the intermediate filament. Astroglia are the only cells that contain GFAP. In the central nervous system, GFAP is a widely used marker for identifying glial-derived neoplasia cells and benign astrocytes. This GFAP antibody is helpful in identifying astrocytic differentiation in tumours outside of the central nervous system and in distinguishing original gliomas from brain metastases.

PRINCIPLE OF PROCEDURE –

This antibody product may be used as the primary antibody in immunohistochemistry testing of formalin-fixed, paraffin-embedded tissue sections. In general, immunohistochemical (IHC) staining techniques allow for the visualization of antigens via the sequential application of a specific antibody to the antigen (primary antibody), a secondary antibody to the primary antibody (optional link antibody/probe), an enzyme complex and a chromogenic substrate with interposed washing steps. The enzymatic activation of the chromogen results in a visible reaction product at the antigen site. The specimen may then be counterstained, and cover slipped. Results are interpreted using a light microscope and aid in the

differential diagnosis of pathophysiological processes, which may or may not be associated with a particular antigen.

SOURCE – Mouse monoclonal

SPECIES REACTIVITY – Human, Mouse, Rat, Cow, Pig, Rabbit, Chicken. Others not known.

CLONE – GA-5

ISOTYPE – IgG1

PROTEIN CONCENTRATION – Call for lot specific Ig concentration

EPITOPE/ANTIGEN – GFAP isolated from pig spinal cord

CELLULAR LOCALISATION – Cytoplasmic

POSITIVE TISSUE CONTROL – Brain or Astrocytoma.

KNOWN APPLICATIONS – Immunohistochemistry (IHC)
30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes

SUPPLIED AS – Buffer with protein carrier and preservative

STORAGE AND STABILITY -

Store at 2ºC to 8ºC. Do not use after expiration date printed on vial. If reagents are stored under conditions other than those specified in the package insert, they must be verified by the user. Diluted reagents should be used promptly; any remaining reagent should be stored at 2ºC to 8ºC

Materials required but not provided -

1. Positive tissue control - Brain or Astrocytoma.
2. Negative control tissue (internal or external)
3. Microscope slides and coverslips
4. Staining jars or baths
5. Timer
6. Xylene or xylene substitute
7. Ethanol or reagent alcohol
8. Deionized or distilled water
9. Heating equipment or enzyme for tissue pretreatment step
10. Detection system
11. Chromogen
12. Wash buffer
13. Hematoxylin
14. Antibody diluents
15. Peroxide block
16. Light microscope
17. Mounting medium

LIMITATIONS -

The optimum antibody dilution and protocols for a specific application can vary. These include, but are not limited to fixation, heat-retrieval method, incubation times, tissue section thickness and detection kit used. Due to the superior sensitivity of these unique reagents, the recommended incubation times and titers listed are not applicable to other detection systems, as results may vary. The data sheet recommendations and protocols are based on exclusive use of Genebio products. Ultimately, it is the responsibility of the investigator to determine optimal conditions.