GENE BIO SOLUTION

Glial Fibrillary Acidic Protein

Format	Catalogno.	Pack size	Dilution
Concentrated	GB040A,B	0.1, 0.5 mL	1:100
Prediluted	GB040AA	6.0 mL	Ready to use

PRODUCT DESCRIPTION -

While it does not react with other intermediate filaments, this antibody does react with the human Glial Fibrillary Acidic Protein antibody. Astrocytes, ependymal cells, and malignancies can be stained with anti-GFAP. Schwann cells, enteric glial cells, and satellite cells can be stained with GFAP in the peripheral nervous system. Axons have shown weak staining due to cross-reaction with neurofilament. Neoplasms of astrocytic origin can be distinguished from other CNS neoplasms by the presence of GFAP, according to studies. Lymphatic tissue, skeletal muscle, the intestines, the liver, the kidneys, the pancreas, and the bladder have all shown no staining.

INTENDED USE -

In Vitro Diagnostics In the field of immunohistochemistry (IHC), the rabbit polyclonal antibody known as Glial Fibrillary Acidic Protein (GFAP{P}) can be used to qualitatively identify glial fibrillary acidic protein in human tissues that have been fixed and embedded in formalin. A trained pathologist should review the patient's medical history and other diagnostic tests in conjunction with morphological investigations employing appropriate controls to round out the clinical interpretation of staining or lack thereof.

SUMMARY AND EXPLANATION -

Human and cow serum have been solid-phase absorbed with this antibody, which reacts with human GFAP. Staining with anti-GFAP identifies tumors, astrocytes, and some types of ependymal cells. There is staining at the periphery of the nervous system on satellite cells, enteric glial cells, and Schwann cells. A cross-reaction with neurofilament has resulted in the weak staining of axons. Neoplasms of astrocytic origin can be differentiated from other types of CNS neoplasms using this method. Lymphatic tissue, skeletal muscle, the intestines, the liver, the kidneys, the pancreas, and the bladder have all shown no staining.

PRINCIPLE OF PROCEDURE -

Immunohistochemistry is a multi-step method that can be used to detect antigens in cells and tissues. The primary antibody is bound to its specific epitope in the initial stage. A primary antibody can be used to identify the antigen, and then a one-step or two-step detection technique can be employed. An enzyme-labeled polymer will bind the main antibody in a one-step process. The addition of a linker antibody to attach to the primary antibody is the second stage of a two-phase process. After that, the linker antibody is bound using an enzyme-labeled polymer. As proof of these antibody binding detections, a colorimetric reaction is observed.

SOURCE - Rabbit polyclonal

SPECIES REACTIVITY - Human, mouse and rat

CLONE - N/A

ISOTYPE - N/A

PROTEIN CONCENTRATION - Lot specific Ig concentration is not available.

EPITOPE/ANTIGEN - Glial fibrillary acidic protein

CELLULAR LOCALISATION - Cytoplasmic

POSITIVE TISSUE CONTROL - Normal brain or astrocytoma

KNOWN APPLICATIONS - Immunohistochemistry
30-40 min. At RT. Staining of formalin-fixed tissues requires heating tissue sections in between pH 7.4 - 9.0 for 45 min at 95ºC followed by cooling at room temperature 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) Positivetissuecontrol-Normalbrainorastrocytoma
2) Negativecontroltissue(internalorexternal)
3) Microscopeslidesandcoverslips
4) Stainingjarsorbaths

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5) Timer
6) Xyleneorxylenesubstitute
7) Ethanolorreagentalcohol
8) Deionizedordistilledwater
9) Heatingequipmentorenzymefortissuepretreatmentstep
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.