GFAP (SMI 22) Monoclonal Antibody Cocktail
Catalog Number: SMI-22R
Available Size: 0.1 mL, 0.5 mL

Description:
Monoclonal antibody cocktail against glial fibrillary acidic protein (GFAP) derived from the Bigner-Eng clones MAb1B4, MAb2E1 and MAb4A11

Also Known As:
glial fibrillary acidic protein

Intended Use:
**Research Use Only (RUO)**
This product is sold for laboratory research use only, not for human or in-vivo use.

Form:
Ascites Fluid

Clone:
SMI 22

Host:
Mouse

IsoType:
IgG2b

Species Reactivity:
Human, sheep, cow, dog, pig, rat, guinea pig, rat, mouse and chicken

Specifity:
The Bigner-Eng antibodies have originally been assayed by indirect radioimmunoassay against fixed cell monolayers of a GFAP-positive human glioma cell line and also by competitive radioimmunoassay with radiolabelled GFAP and by competitive immunoradioassay with radiolabelled antibody. They have been further characterized by immunoblots of GFAP and by immunocytochemistry with the peroxidase-antiperoxidase method.

Each of the components of SMI 22 is specific for GFAP and visualizes immunocytochemically astrocytes and astrocytic processes as well as Bergman glia in a wide variety of species (human, sheep, cow, dog, pig, rat, guinea pig, rat, mouse and chicken). The mixture of the three antibodies provides, however, for a more comprehensive detection of astrocytomas than each antibody alone. Both, anaplastic and reactive astrocytes are stained immunocytochemically. Metastatic tumors and brain tumors of non-astrocytic origin, such as medulloblastomas, meningiomas, choroid plexus papillomas and schwannomas are not stained. There appears to be a positive correlation between fibrillarity of immunocytochemical localization in astrocytomas and their degrees of differentiation, and a negative correlation between the percentage of positive cells and the degree of anaplasticity. In morphologically diagnosed ependymomas and oligodendrogliomas positive reaction appears to reveal presence of malignant astrocytes.

Uses:
This antibody is effective in immunoblotting (WB), immunocytochemistry, immunohistochemistry (IHC) and ELISA.

Suggested Working Dilution:
The extent of permissible dilution of SMI 22 beyond those recommended for general application depends upon nature and concentration of the antigen examined, species of the antigen, method of fixation and kind of section examined.

- WB: 1:1,000
- IHC: 1:1,000
- ELISA: 1:1,000

See reverse side for additional information
**Storage:**
Store at -20°C. Upon initial thawing, apportion into working aliquots and store at -20°C. Avoid repeated freeze-thaw cycles to prevent denaturing the antibody. For long-term storage, keep the antibody at -80°C.

**References:**


**Warranty/Conditions:**
Covance products may not be resold or modified for resale without prior written approval. All sales are subject to Covance Antibody Products Terms and Conditions of Sale.

**Datasheet Revision Date:**
3/20/2013

**Related Products:**
- Ultra Streptavidin (USA) Horseradish peroxidase (HRP) 50 Test, Multi-Species, DAB Detection Kit Catalog Number SIG-32250

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Immunostaining of the SMI 22 antibody (green) on rat brain (8um horizontal section). Other structures visualized with anti-NFH (red, PCK-554P) and Hoechst. Photo courtesy of Molecular Expressions.