Product datasheet for UM500005

GFAP Mouse Monoclonal Antibody [Clone ID: UMAB5]

Product data:

Product Type: Primary Antibodies
Clone Name: UMAB5
Applications: IF, IHC, WB
Recommended Dilution: WB 1:500–1000, IHC 1:50, IF 1:100
Reactivity: Human, Mouse, Rat
Host: Mouse
Isotype: IgG1
Clonality: Monoclonal
Immunogen: Full length human recombinant protein of human GFAP (NP_002046) produced in HEK293T cell.
Formulation: PBS (pH 7.3) containing 1% BSA, 50% glycerol and 0.02% sodium azide.
Concentration: 0.5~1.0 mg/ml (Lot Dependent)
Purification: Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)
Conjugation: Unconjugated
Storage: Store at -20°C as received.
Stability: Stable for 12 months from date of receipt.
Predicted Protein Size: 49.9 kDa
Gene Name: Homo sapiens glial fibrillary acidic protein (GFAP), transcript variant 1, mRNA.
Database Link:

Entrez Gene 14580 Mouse
Entrez Gene 24387 Rat
Entrez Gene 2670 Human
P14136

Background:
This gene encodes one of the major intermediate filament proteins of mature astrocytes. It is used as a marker to distinguish astrocytes from other glial cells during development. Mutations in this gene cause Alexander disease, a rare disorder of astrocytes in the central nervous system. Alternative splicing results in multiple transcript variants encoding distinct isoforms.
Synonyms: ALXDRD
Protein Families: ES Cell Differentiation/IPS

Product images:

HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY GFAP ([RC204548], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-GFAP (1:500).

Western blot analysis of extracts (35ug) from 9 different cell lines by using anti-GFAP monoclonal antibody (Clone UMAB5).
Western blot analysis of extracts (35ug) from 1 cell line lysate and 1 tissue lysate by using anti-GFAP monoclonal antibody (1:500).

Western Blot analysis of 10 different human tissue lysates (10ug) by using anti-GFAP monoclonal antibody (clone UMAB5, 1:500)

Immunohistochemical staining of paraffin-embedded Human brain tissue using anti-GFAP mouse monoclonal antibody (Clone UMAB5; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min).
Immunohistochemical staining of paraffin-embedded Human embryonic brain tissue using anti-GFAP mouse monoclonal antibody (Clone UMAB5; heat-induced epitope retrieval by 10mM citric buffer, pH 6.0, 120°C for 3min).

Immunohistochemical staining of paraffin-embedded Human adult brain tissue within the normal limits using anti-GFAP mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH 8.5) at 120°C for 3min, UM500005) (1:500)

Immunofluorescent staining of PC-12 cells using GFAP mouse monoclonal antibody (UM500005, green). Actin filaments were labeled with TRITC-phalloidin (red), and nuclear with DAPI (blue). The three-color overlay image is located at the bottom-right corner.
Confocal immunofluorescence image of primary rat neurons labeled with anti-GFAP mouse monoclonal antibody (UM500005, green, 1:100) and with DAPI (blue) for nuclear. Scale bar, 10µm.