

JOT0052-1: Anti-GFAP VHH antibody

Clonality :	Monoclonal
Application :	IHC
Reactivity :	Human
Gene :	GFAP
Gene ID :	2670
Uniprot ID :	P14136
Alternative Name :	Astrocyte or Intermediate Filament Protein, Glial Fibrillary Acidic Protein (GFAP)
Isotype :	Camelid VHH

Description

Alpaca derived anti-GFAP VHH single domain antibody (molecular weight:13.6 kDa) with a 6*His tag at its C-terminal, expressed in E. coli under conditions free from animal derived components.

Glial fibrillary acidic protein (GFAP) is a class III intermediate filament protein that is largely expressed in astrocytes in addition to non-myelinating Schwann cells and glial cells. Human GFAP protein is 432 amino acids in length with a theoretical molecular weight of ~50 kDa. GFAP has at least 10 known isoforms, with the most prevalent and common in the brain being GFAP-alpha which is made of a head domain, a rod domain with four coils (1A, 1B, 2A, 2B) joined by linker regions, and a tail domain. GFAP is a marker of mature astrocytes, but is also expressed throughout development in both fetal and adult neural stem cells. While the exact function of GFAP is still elusive, it has been shown to play a role in cellular processes such as migration, mitosis, structural integrity, and signalling.

Specificity: Glial Fibrillary Acidic Protein (GFAP)

This is a product from [Jotbody](#), Hong Kong. This antibody is made available worldwide by ABEOMICS Inc.

Product Info

Amount :	100 µg / 50 µg
Purification :	Affinity chromatography purified via Ni-charged resin. Purity : > 95% as determined by SDS-PAGE
Content :	1 mg/mL by Nanodrop Buffer : 25 mM TAPS pH8.5, 500 mM NaCl, 5 mM EDTA, 0.1 % Proclin 300
Storage condition :	4°C; Do not freeze.

Application Note

Positive controls : Positive WB detected in: U87-MG cells

Positive IHC detected in: mouse brain tissue <> Recommended dilutions : WB 1:1000-1:5000

IHC: 1:200-1:600

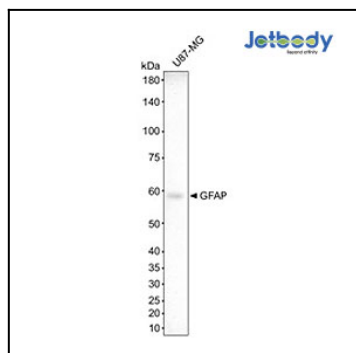


Figure 1: Lysate of U87-MG cell line was subjected to SDS- PAGE followed by western blot with anti-GFAP VHH antibody (JOT0052-1) at dilution of 1:3000 incubated at room temperature for 1.5 hours.

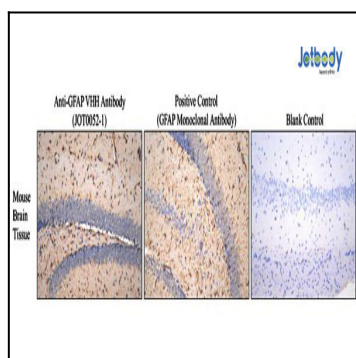


Figure 2: Immunohistochemical analysis of paraffin-embedded mouse brain tissue slides using anti-GFAP VHH antibody (JOT0052-1) at 2.5ug/ml and positive control (GFAP polyclonal antibody, a competitor product) at 1:500 (under 20x lens), respectively. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).