



## RayBiotech, Inc.

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# Certificate of Analysis and Data Sheet

## Rabbit anti-Glial fibrillary acidic protein antibody

**Catalog No.**  
130-10037

**Isotype:**  
Rabbit Ig G

**Species:**  
Human

**Accession No:**  
P14136

### Description

Glial fibrillary acidic protein, or GFAP, is an intermediate filament (IF) protein belonging to the type III subclass of IF proteins. Like other IF proteins, GFAP is composed of an amino terminal head domain, a central rod domain and a carboxy terminal tail domain. GFAP is specifically found in astroglia, a cell type which is highly responsive to neurologic insults. Astrogliosis is found to be a result of mechanical trauma, AIDS dementia, prion infection and inflammatory demyelination diseases, and is accompanied by an increase in GFAP expression. GFAP is an immunohistochemical marker for localizing benign astrocyte and neoplastic cells of glial origin in the central nervous system.

### Applications

**Table Summary of antibody applications and working conditions**

Options Functions	YES	NO	Not determined	Recommended Work dilution or concentration
ELISA	*			1:80000 (at least detecting 12.5 ng/ml)
Western Blotting			*	
Enzyme Immunoassay(EIA)			*	
Immunohistology - paraffin			*	
Immunohistology - resin			*	
Immunoprecipitation			*	
Flow Cytometry			*	
Neutralization			*	

**Note:** Other applications are not tested yet. Optimal dilutions should be determined by each laboratory for each application.

**The products are furnished for LABORATORY RESEARCH USE ONLY.  
Not for diagnostic or therapeutic use.**



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### Preparation

Immunogen was recombinant protein derived from Human GFAP. This antibody was produced from a rabbit immunized with the immunogen. The IgG fraction was purified from rabbit serum by ammonium sulphate precipitation followed by Protein A/G affinity chromatography.

### Binding Activity

The antibody can specifically bind to its immunogen, and did not show any cross reactivity with unrelated antigens in ELISA. The specificity for binding to recombinant protein, cellular protein and native antigen is not defined. Cross reactivity with mouse and rat Smooth Muscle was not tested yet.

### Reconstitution

Supplied as lyophilized and purified antibody originally containing PBS, without **Preservative Stabilizers**, lacking Sodium Azide. *It final concentration is indicated in shipping vial.*

The antibody is stable for at least years from the data of receipt when stored at  $-20^{\circ}\text{C}$  to  $-70^{\circ}\text{C}$ . Reconstituted antibody (suggesting with sterile PBS) can also be aliquotted and stored frozen at  $-20^{\circ}\text{C}$  to  $-70^{\circ}\text{C}$  in a manual defrost freezer for months without detectable loss activity. Upon reconstitution, the antibody can also be stored over months at  $4^{\circ}\text{C}$ . **Please avoid freeze-thaw cycles.**

### Storage

Keep it at  $4^{\circ}\text{C}$  if intended for use within a month. Store at  $-20^{\circ}\text{C}$  if over months. **Minimize freezing and thawing when use.**

### Related products

1. Rabbit Anti-Bovine GFAP(cat#DS-PB-00867)
2. Goat Anti-Human GFAP (C-terminus)(cat#DS-PB-02261)

### Reference

Quinlan RA, Brenner M, Goldman JE, Messing A. GFAP and its role in Alzheimer disease. Exp Cell Res. 2007 Jun 10;313(10):2077-87.

Zhu H, Dahlström A. Glial fibrillary acidic protein-expressing cells in the neurogenic regions in normal and injured adult brains. J Neurosci Res. 2007 Sep;85(12):2783-92.

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