

For Research Use Only

# CoraLite® Plus 488-conjugated GFAP

## Monoclonal antibody



Catalog Number: CL488-60190

4 Publications

### Basic Information

|   |  |   |
|---|--|---|
| <b>Catalog Number:</b><br>CL488-60190       | <b>GenBank Accession Number:</b><br>BC013596         | <b>Purification Method:</b><br>Protein A purification             |
| <b>Size:</b><br>1000 µg/ml                  | <b>GeneID (NCBI):</b><br>2670                        | <b>CloneNo.:</b><br>4B2E10  |
| <b>Source:</b><br>Mouse                     | <b>UNIPROT ID:</b><br>P14136                         | <b>Recommended Dilutions:</b><br>IF-P 1:50-1:500                  |
| <b>Isotype:</b><br>IgG2a                    | <b>Full Name:</b><br>glial fibrillary acidic protein | <b>Excitation/Emission maxima wavelengths:</b><br>493 nm / 522 nm |
| <b>Immunogen Catalog Number:</b><br>AG10452 | <b>Calculated MW:</b><br>432 aa, 50 kDa              |   |

### Applications

|   |   |
|---|---|
| <b>Tested Applications:</b><br>IF-P                   | <b>Positive Controls:</b><br>IF-P : mouse brain tissue, |
| <b>Cited Applications:</b><br>IF                      |   |
| <b>Species Specificity:</b><br>human, mouse, rat, pig |   |
| <b>Cited Species:</b><br>rat, mouse                   |   |

### Background Information

GFAP (Glial fibrillary acidic protein) is a type III intermediate filament (IF) protein specific to the central nervous system (CNS). GFAP is one of the main components of the intermediate filament network in astrocytes and has been proposed as playing a role in cell migration, cell motility, maintaining mechanical strength, and in mitosis. GFAP is expressed in central nervous system cells, predominantly in astrocytes. GFAP is commonly used as an astrocyte marker. However, GFAP is also present in peripheral glia and in non-CNS cells, including fibroblasts, chondrocytes, lymphocytes, and liver stellate cells (PMID: 21219963). Astrocytes express 10 different isoforms of GFAP that differ in the rod and tail domains (PMID: 25726916), which means that they differ in molecular size. Isoform expression varies during the development and across different subtypes of astrocytes. Not all isoforms are upregulated in reactive astrocytes. Intermediate filament proteins are regulated by phosphorylation. Six phosphorylation sites have been identified in GFAP protein, at least some of which are reported to control filament assembly (PMID: 21219963). GFAP localizes to intermediate filaments and stains well in astrocyte cellular processes. This antibody is conjugated with CL488, Ex/Em 488 nm/515 nm.

### Notable Publications

| Author          | Pubmed ID | Journal         | Application |
|-----------------|-----------|-----------------|-------------|
| Dawei Sun       | 34487578  | J Neurosci Res  | IF          |
| Hongyan Jiang   | 34289379  | Brain Res       | IF          |
| Naseer A Kutchy | 35462907  | Front Pharmacol | IF          |

### Storage

**Storage:**  
Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

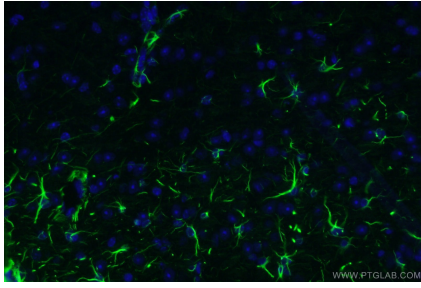
**Storage Buffer:**  
PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.

Aliquoting is unnecessary for -20°C storage

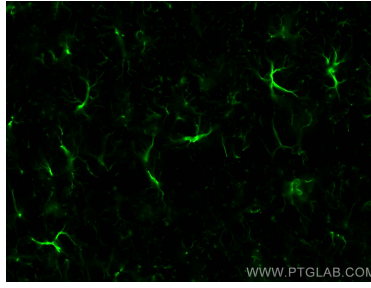
For technical support and original validation data for this product please contact:  
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

## Selected Validation Data



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse brain tissue using CoraLite® Plus 488 GFAP antibody (CL488-60190, Clone: 4B2E10 ) at dilution of 1:100. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed mouse brain tissue using CoraLite® Plus 488 GFAP antibody (CL488-60190, Clone: 4B2E10 ) at dilution of 1:200.