

GFAP Recombinant Alpaca VHH (SdAb2409.GFAP) - MiniMab™

VHH nanobody targeting glial fibrillary acidic protein (GFAP), part of our MiniMab™ SdAb series that have been engineered for optimal conjugate performance.



Product Description

GFAP Recombinant Alpaca VHH (SdAb2409.GFAP) recognizes the glial fibrillary acidic protein (GFAP) expressed in neural tissues. This high-affinity single-domain antibody (SdAb), also known as camelid VHH or Nanobody®, is part of our MiniMab™ series of highly optimized conjugated probes. The nanobody has been validated for immunofluorescence microscopy and is available conjugated to CF® Dyes.

Features of MiniMab™ Nanobodies single-domain antibodies

- Superior to conventional antibodies: deeper tissue penetration, higher solubility and stability, and faster staining
- Minimal epitope-dye displacement—perfect for super-resolution imaging
- Specifically developed and optimized for immunofluorescence
- Labeled with bright, photostable CF® Dyes, including near-infrared CF®740 option
- Available as conjugates with Biotium's best-in-class dyes for STORM

GFAP is a 49-kDa type III intermediate filament protein found in neural tissues, serving as a marker that differentiates astrocytes from other glial cells during the development of the central nervous system. Although three splice variants of GFAP have been identified, the alpha isoform is the most abundantly expressed in astrocytes. GFAP is capable of co-assembling with vimentin and nestin in astrocytes, though these interactions are not essential for its filament formation. Similar to other intermediate filaments, GFAP assembly is regulated by phosphorylation and dephosphorylation of its N-terminal domain. Mutations in the GFAP gene have been linked to Alexander disease, and elevated GFAP expression has been observed in certain tumors derived from glial cells.

Learn more about [MiniMab™ single domain antibodies](#) paired with Biotium's industry-leading [CF® Dyes for super-resolution](#) as well as our innovative reagents for [immunofluorescence microscopy](#); this includes our [NucSpot® Nuclear Stains](#) for bright and nuclear-specific staining in a wide color selection, and [CytoLiner™ Fixed Cell Membrane Stains](#) for robust membrane staining in formaldehyde-fixed cells.

[View our full selection of primary and secondary antibodies](#) available with bright CF® Dyes and other labels.

Call us : [800-304-5357](#)

Product attributes

| | |
|--------------------------------|--|
| Antibody number | N001 |
| Antibody type | Biotium Choice Primary, MiniMab™ SdAb (VHH), Primary |
| Clonality | Recombinant single-domain antibody |
| Host species | Alpaca |
| Clone | SdAb2409.GFAP |
| Antibody reactivity (target) | GFAP |
| Synonyms | Astrocyte or Intermediate Filament Protein, Glial Fibrillary Acidic Protein (GFAP) |
| Species reactivity | Human, Mouse, Rat |
| Human gene symbol | GFAP |
| Entrez gene ID | 14580 |
| Molecular weight | 50kDa |
| Cell/tissue expression | Glia |
| Verified antibody applications | IF (verified) |
| Positive control | Brain, Retina |
| Antibody application notes | Immunofluorescence: 0.1 µg/mL; Optimal concentration to be determined by end-user. |
| Antibody research areas | Neuroscience |
| Antibody/conjugate formulation | Conjugates: PBS/0.1% rBSA/0.05% azide |
| Shelf life | Guaranteed for at least 24 months from date of receipt when stored as recommended |
| Storage Conditions | Store conjugates at 2 °C to 8 °C, Protect fluorescent conjugates from light |
| Shipping condition | Room temperature |
| Regulatory status | For research use only (RUO) |
| Product origin | Recombinant alpaca VHH produced in E.coli, Recombinant BSA produced in Chinese hamster ovary cells |

GFAP Recombinant Alpaca VHH (SdAb2409.GFAP) – MiniMab™

| Conjugation | Ex/Em | Conc. | STORM ¹ compatibility | Catalog No. | Dye Features |
|-------------|------------|-----------|----------------------------------|---------------------------------|----------------------------------|
| CF®488A | 490/516 nm | 100 µg/mL | Yes | N001-488A-200UL | CF®488A Features |
| CF®498 | 498/519 nm | 100 µg/mL | Yes | N001-498-200UL | CF®498 Features |
| CF®568 | 562/584 nm | 100 µg/mL | Yes | N001-568-200UL | CF®568 Features |
| CF®583R | 585/609 nm | 100 µg/mL | Yes | N001-583R-200UL | CF®583R Features |
| CF®647 | 652/668 nm | 100 µg/mL | Yes | N001-647-200UL | CF®647 Features |
| CF®660C | 667/685 nm | 100 µg/mL | Yes | N001-660C-200UL | CF®660C Features |
| CF®680 | 681/698 nm | 100 µg/mL | Yes | N001-680-200UL | CF®680 Features |
| CF®740 | 742/767 nm | 100 µg/mL | No | N001-740-200UL | CF®740 Features |

¹ STORM: Stochastic optical reconstruction microscopy. [Learn more about CF® Dyes for super-resolution.](#)
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