

# Product Datasheet

## GFAP Antibody (5C10) - BSA Free NBP1-05197

Unit Size: 0.1 ml

Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.

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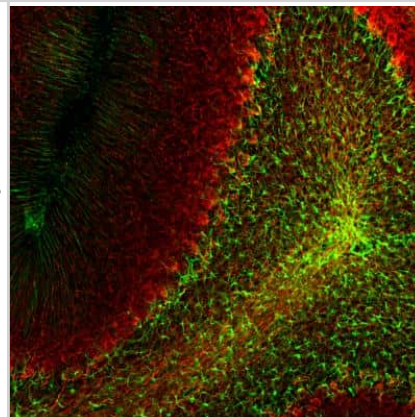
**NBP1-05197**

GFAP Antibody (5C10) - BSA Free

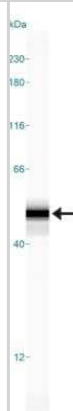
Product Information	
Unit Size	0.1 ml
Concentration	1.0 mg/ml
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Monoclonal
Clone	5C10
Preservative	5mM Sodium Azide
Isotype	IgG1
Purity	Immunogen affinity purified
Buffer	PBS, 50% glycerol
Target Molecular Weight	50 kDa
Product Description	
Description	Novus Biologicals Mouse GFAP Antibody (5C10) - BSA Free (NBP1-05197) is a monoclonal antibody validated for use in IHC, WB, ICC/IF and Simple Western. Anti-GFAP Antibody: Cited in 29 publications. All Novus Biologicals antibodies are covered by our 100% guarantee.
Host	Mouse
Gene ID	2670
Gene Symbol	GFAP
Species	Human, Mouse, Rat, Porcine, Bovine, Equine
Marker	Astrocyte Marker
Immunogen	This GFAP Antibody (5C10) was developed against a preparation of purified pig spinal cord GFAP
Product Application Details	
Applications	Western Blot, Simple Western, Immunohistochemistry-Paraffin, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Frozen, Immunohistochemistry Free-Floating
Recommended Dilutions	Western Blot 1:5000, Simple Western 1:3000, Immunohistochemistry 1:1000, Immunocytochemistry/ Immunofluorescence 1:1000, Immunohistochemistry-Paraffin 1:1000, Immunohistochemistry-Frozen 1:1000, Immunohistochemistry Free-Floating 1:1000
Application Notes	<p>This GFAP (5C10) antibody is useful for Immunocytochemistry/Immunofluorescence, Immunohistochemistry on paraffin-embedded and frozen sections, and Western blot. In WB, a band can be seen at approx. 50 kDa.</p> <p>In Simple Western only 10 - 15 uL of the recommended dilution is used per data point.</p> <p>See <a href="#">Simple Western Antibody Database</a> for Simple Western validation: Tested in Human Brain lysate 0.05 mg/mL, separated by Size, antibody dilution of 1:3000, apparent MW was 51 kDa. Separated by Size-Wes, Sally Sue/Peggy Sue.</p>

## Images

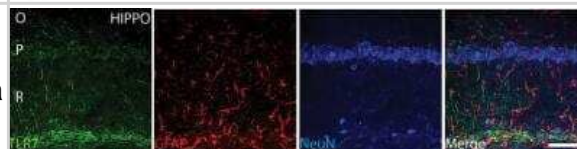
Immunohistochemistry Free-Floating: GFAP Antibody (5C10) [NBP1-05197] - Analysis of rat cerebellum section stained with mouse GFAP mAb, dilution 1:1,000 (Green), costained with rabbit neurofilament NF-L pAb, dilution 1:2,000 (Red). Following transcardial perfusion with 4% paraformaldehyde, brain was post fixed for 24hrs, cut to 45uM, and free-floating sections were stained with antibodies. The GFAP antibody stains a network of astroglial cells, while the NF-L antibody labels neuronal cells and their processes.



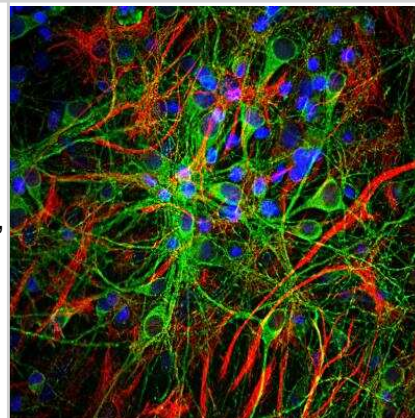
Simple Western: GFAP Antibody (5C10) [NBP1-05197] - Simple Western lane view shows a specific band for GFAP in 0.05 mg/ml of Human Brain lysate. This experiment was performed under reducing conditions using the 12-230 kDa separation system.



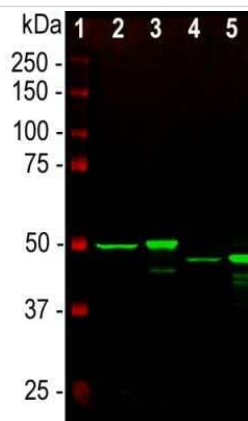
Immunohistochemistry: GFAP Antibody (5C10) [NBP1-05197] - The immunofluorescence of TLR7 recognized by Alexa 488, green (NBP2-24906). GFAP recognized by Alexa 594, red. NEUN recognized by Alexa 633, (blue) and merged image in the hippocampal region. NeuN and GFAP were applied to show the distribution of TLR7 within neuronal and supportive tissue populations. Scale bar 80 um. Image collected and cropped by CiteAb from the following publication ([//doi.org/10.1371/journal.pone.0222818](https://doi.org/10.1371/journal.pone.0222818)) licensed under a CC-BY license.



Immunohistochemistry: GFAP Antibody (5C10) [NBP1-05197] - Analysis of rat cerebellum section stained with mouse mAb to GFAP, NBP1-05197, dilution 1:1,000, in green, costained with rabbit pAb to neurofilament NF-L, dilution 1:2,000, in red. Following transcardial perfusion of rat with 4% paraformaldehyde, brain was post fixed for 24 hours, cut to 45uM, and free-floating sections were stained with above antibodies. The NBP1-05197 antibody stains a network of astroglial cells, while the NF-L antibody labels neuronal cells and their processes.



Western Blot: GFAP Antibody (5C10) [NBP1-05197] - Analysis of whole tissue lysates using mouse mAb to GFAP, NBP1-05197, dilution 1:2,000, in green: [1] protein standard (red), [2] rat brain, [3] rat spinal cord, [4] mouse brain, [5] mouse spinal cord. The strong band at about 50kDa corresponds to the GFAP protein.



## Publications

Scaricamazza S, Salvatori I, Amadio S et al. Repurposing of Trimetazidine for amyotrophic lateral sclerosis: A study in SOD1(G93A) mice *British Journal of Pharmacology* 2022-04-01 [PMID: 34783031] (Immunohistochemistry, Mouse)

Becker-Krail DD, Ketchesin KD, Burns JN et al. Astrocyte Molecular Clock Function in the Nucleus Accumbens Is Important for Reward-Related Behavior *Biological Psychiatry* 2022-07-01 [PMID: 35461698] (Immunohistochemistry, Mouse)

S Gurung, N Reuter, A Preno, J Dubaut, H Nadeau, K Hyatt, K Singleton, A Martin, WT Parks, JF Papin, DA Myers Zika virus infection at mid-gestation results in fetal cerebral cortical injury and fetal death in the olive baboon *PLoS Pathog.*, 2019-01-18;15(1):e1007507. 2019-01-18 [PMID: 30657788] (Immunohistochemistry, Mouse)

Postnikova TY, Diespirov GP, Amakhin DV et al. Impairments of Long-Term Synaptic Plasticity in the Hippocampus of Young Rats during the Latent Phase of the Lithium-Pilocarpine Model of Temporal Lobe Epilepsy *International Journal of Molecular Sciences* 2021-12-12 [PMID: 34948152] (Immunohistochemistry, Mouse)

Pacheco-Quinto J, Eckman CB, Eckman EA. Major amyloid-beta-degrading enzymes, endothelin-converting enzyme-2 and neprilysin, are expressed by distinct populations of GABAergic interneurons in hippocampus and neocortex. *Neurobiol Aging* 2016-08-20 [PMID: 27644077] (Immunohistochemistry, Mouse)

Griflyuk AV, Postnikova TY, Zaitsev AV. Prolonged Febrile Seizures Impair Synaptic Plasticity and Alter Developmental Pattern of Glial Fibrillary Acidic Protein (GFAP)-Immunoreactive Astrocytes in the Hippocampus of Young Rats *International Journal of Molecular Sciences* 2022-10-13 [PMID: 36293077] (Immunohistochemistry, Mouse)

Deerhake ME, Danzaki K, Inoue M et al. Dectin-1 limits autoimmune neuroinflammation and promotes myeloid cell-astrocyte crosstalk via Card9-independent expression of Oncostatin M *Immunity* 2021-02-08 [PMID: 33581044]

Laura Jahnke, Virginie Perrenoud, Souska Zandi, Yuebing Li, Federica Maria Conedera, Volker Enzmann, Girish Kumar Srivastava Modulation of Extracellular Matrix Composition and Chronic Inflammation with Pirfenidone Promotes Scar Reduction in Retinal Wound Repair Cells 2024-01-16 [PMID: 38247855]

Duan Q, Zhang Q, Nie K et al. Myo1d Promotes Alpha-Synuclein Transfer from Brain Microvascular Endothelial Cells to Pericytes through Tunneling Nanotubes *iScience* 2023-07-01 [PMID: 37575183] (ICC/IF, Mouse)

Details:

Dilutions: 1:100

Rueda-Gensini L, Serna JA, Rubio D et al. Three-dimensional neuroimmune co-culture system for modeling Parkinson's Disease microenvironments in vitro *Biofabrication* 2023-06-27 [PMID: 37369196] (Immunocytochemistry/Immunofluorescence, Human)

Jahnke L, Zandi S, Elhelbawi A et al. Characterization of Macroglia Response during Tissue Repair in a Laser-Induced Model of Retinal Degeneration *International Journal of Molecular Sciences* 2023-05-24 [PMID: 37298126] (IHC-P, Mouse)

Details:

1:200 IHC-P dilution

Tseng KY, Stratoulis V, Hu WF et al. Augmenting hematoma-scavenging capacity of innate immune cells by CDNF reduces brain injury and promotes functional recovery after intracerebral hemorrhage *Cell death & disease* 2023-02-15 [PMID: 36792604] (IHC-Fr, Mouse)

More publications at <http://www.novusbio.com/NBP1-05197>





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### **Products Related to NBP1-05197**

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NBP2-33376H	Blue Marker Antibody (6F4-F6) [HRP]
HAF007	Goat anti-Mouse IgG Secondary Antibody [HRP]
NB7539	Goat anti-Mouse IgG (H+L) Secondary Antibody [HRP]
NBP1-97005-0.5mg	Mouse IgG1 Isotype Control (MG1)

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### **Limitations**

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

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