

# Product Datasheet

## GFAP Antibody (5C10) 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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**Reviews: 1 Publications: 25**

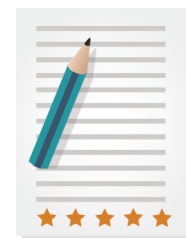
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**NBP1-05197**

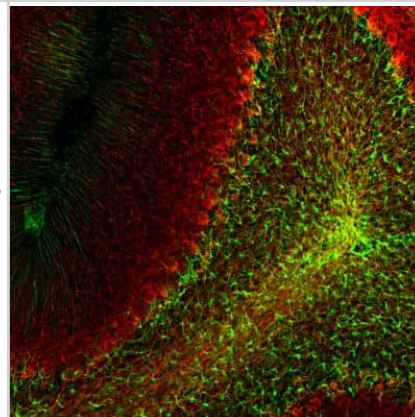
GFAP Antibody (5C10)

<b>Product Information</b>	
<b>Unit Size</b>	0.1 ml
<b>Concentration</b>	1.0 mg/ml
<b>Storage</b>	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
<b>Clonality</b>	Monoclonal
<b>Clone</b>	5C10
<b>Preservative</b>	5mM Sodium Azide
<b>Isotype</b>	IgG1
<b>Purity</b>	Immunogen affinity purified
<b>Buffer</b>	PBS, 50% glycerol
<b>Target Molecular Weight</b>	50 kDa
<b>Product Description</b>	
<b>Host</b>	Mouse
<b>Gene Symbol</b>	GFAP
<b>Species</b>	Human, Mouse, Rat, Porcine, Bovine, Equine
<b>Marker</b>	Astrocyte Marker
<b>Immunogen</b>	This GFAP Antibody (5C10) was developed against a preparation of purified pig spinal cord GFAP
<b>Product Application Details</b>	
<b>Applications</b>	Western Blot, Simple Western, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Frozen, Immunohistochemistry-Paraffin, Immunohistochemistry Free-Floating
<b>Recommended Dilutions</b>	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
<b>Application Notes</b>	<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. Separated by Size-Wes, Sally Sue/Peggy Sue.</p>

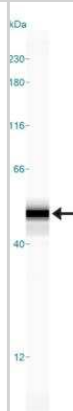


## Images

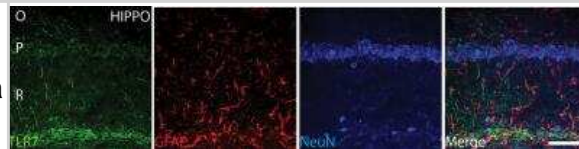
Immunohistochemistry Free-Floating: GFAP Antibody (5C10) [NBP1-05197] - Analysis of rat cerebellum section stained with mouse GFAP mAb, dilution 1:1,000 (Green), costained with rabbit neurofilament NF-L pAb, dilution 1:2,000 (Red). Following transcardial perfusion with 4% paraformaldehyde, brain was 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.



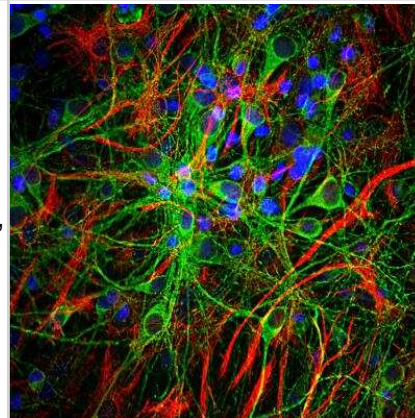
Simple Western: GFAP Antibody (5C10) [NBP1-05197] - Simple Western lane view shows a specific band for GFAP in 0.05 mg/ml of Human Brain lysate. This experiment was performed under reducing conditions using the 12-230 kDa separation system.



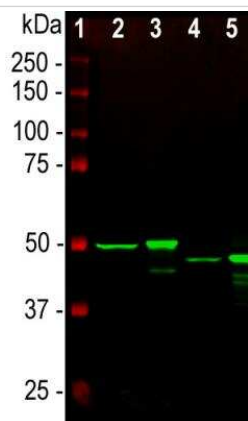
Immunohistochemistry: GFAP Antibody (5C10) [NBP1-05197] - The immunofluorescence of TLR7 recognized by Alexa 488, green (NBP2-24906). GFAP recognized by Alexa 594, red. NEUN recognized by Alexa 633, (blue) and merged image in the hippocampal region. NeuN and GFAP were applied to show the distribution 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

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] (B/N, ICC/IF)

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]

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] (ICC/IF, B/N, IHC)

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] (B/N)

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] (ICC/IF, 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)

Wong JK, Lin J, Kung NJ et al. Cerebrospinal fluid immunoglobulins in primary progressive multiple sclerosis are pathogenic Brain : a journal of neurology 2023-02-03 [PMID: 36732292] (IHC, Mouse)

Hernandez, C M, Cortez, I Et al. Research tool: Validation of floxed alpha 7 nicotinic acetylcholine receptor conditional knockout mice using in vitro and in vivo approaches. J Physiol 2014-08-01 [PMID: 24879866] (IF/IHC, Mouse)

Fayaz MA, Rosa GDS, Honaramooz A. Neonatal Porcine Germ Cells Dedifferentiate and Display Osteogenic and Pluripotency Properties Cells 2021-10-20 [PMID: 34831039] (ICC/IF)

Lananna B V, Nadarajah C J et al. Cell-Autonomous Regulation of Astrocyte Activation by the Circadian Clock Protein BMAL1. Cell Rep 2018-02-10 [PMID: 30282019] (IF/IHC, Mouse)

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



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### Products Related to NBP1-05197

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HAF007	Goat anti-Mouse IgG Secondary Antibody [HRP]
NB720-B	Rabbit anti-Mouse IgG (H+L) Secondary Antibody [Biotin]
NBP1-97005-0.5mg	Mouse IgG1 Isotype Control (MG1)
H00002670-Q01-10ug	Recombinant Human GFAP GST (N-Term) Protein

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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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