

# Product Datasheet

## Tau Antibody (5B10) - BSA Free NBP2-50051

Unit Size: 0.1 ml

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

[www.novusbio.com](http://www.novusbio.com)



[technical@novusbio.com](mailto:technical@novusbio.com)

### Publications: 1

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Updated 2/23/2025 v.20.1

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**NBP2-50051**

Tau Antibody (5B10) - BSA Free

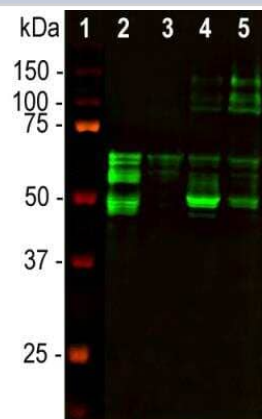
Product Information	
Unit Size	0.1 ml
Concentration	1 mg/ml
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Monoclonal
Clone	5B10
Preservative	0.035% Sodium Azide
Isotype	IgG1
Purity	Immunogen affinity purified
Buffer	50% PBS, 50% glycerol
Target Molecular Weight	48-67 kDa

Product Description	
Host	Mouse
Gene ID	4137
Gene Symbol	MAPT
Species	Human, Mouse, Rat
Specificity/Sensitivity	This antibody is expected to bind to all Tau isoforms.
Immunogen	Recombinant full length 441 amino acid version of the shortest human tau isoform. Epitope located in the peptide HVPGGGNKKIETHKLFREN, amino acids 362-381. [UniProt# P10636]

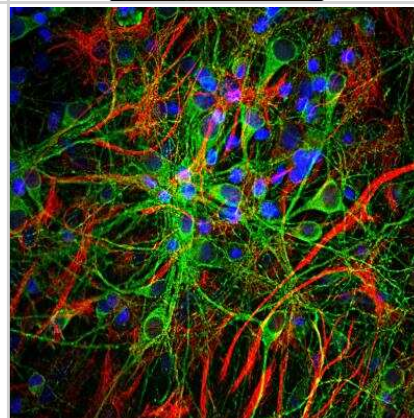
Product Application Details	
Applications	Western Blot, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry
Recommended Dilutions	Western Blot 1:10000, Immunohistochemistry 1:1000, Immunocytochemistry/ Immunofluorescence 1:1000
Application Notes	In Western blot, multiple bands can be seen in the range of 48-67 kDa. Higher molecular weight "big tau" isoforms mostly in peripheral tissues.

## Images

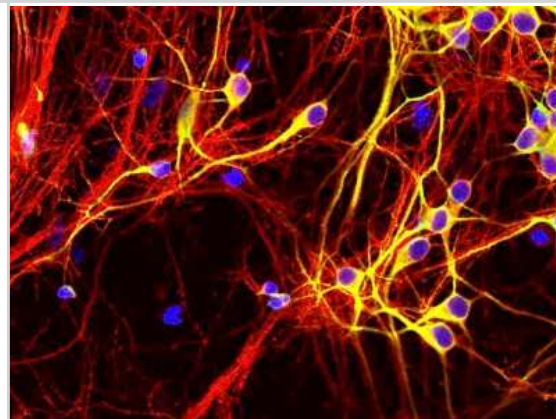
Western Blot: Tau Antibody (5B10) [NBP2-50051] - Analysis of tissue lysates using mouse mAb to MAP-tau, NBP2-50051, dilution 1:2,000 in green: [1] protein standard (red), [2] rat brain, [3] rat spinal cord, [4] mouse brain, [5] mouse spinal cord. Tau protein is expressed as up to 9 different isoforms of different molecular weight, and so appears as multiple closely spaced bands in the region of the blot from 48 kDa to 67 kDa with some higher molecular weight big tau Isoforms.



Immunocytochemistry/Immunofluorescence: Tau Antibody (5B10) [NBP2-50051] - Analysis of cortical neuron-glia culture from E20 rat stained with mouse mAb to MAP-tau, NBP2-50051, dilution 1:2,000 in green, and costained with chicken pAb to GFAP, dilution 1:5,000 in red. The blue is DAPI staining of nuclear DNA. NBP2-50051 stains perikarya, dendrites and axons of neurons, while the GFAP antibody labels astrocytes.



Immunocytochemistry/Immunofluorescence: Tau Antibody (5B10) [NBP2-50051] - E18 rat brain cultures were grown for 10 days, fixed and immunostained with NBP2-50051 in red and chicken antibody to MAP2 (NB300-213, green) and for DNA (blue). NBP2-50051 stains the neuronal perikarya, dendrites and axonal process strongly and does not stain non neuronal cells in these cultures. The MAP2 antibody also stains neurons only, but only the perikarya and dendrites. As a result perikarya and dendrites appears yellow, since they contain both tau and MAP2, while axons appear red as they contain only tau.



## Publications

Ibarra IL, Ratnu VS, Gordillo L et al. Comparative chromatin accessibility upon BDNF stimulation delineates neuronal regulatory elements *Molecular systems biology* 2022-08-01 [PMID: 35996956] (ICC/IF, Mouse)

Details:  
Appendix Figure S12



### **Novus Biologicals USA**

10730 E. Briarwood Avenue  
Centennial, CO 80112  
USA  
Phone: 303.730.1950  
Toll Free: 1.888.506.6887  
Fax: 303.730.1966  
nb-customerservice@bio-techne.com

### **Bio-Techne Canada**

21 Canmotor Ave  
Toronto, ON M8Z 4E6  
Canada  
Phone: 905.827.6400  
Toll Free: 855.668.8722  
Fax: 905.827.6402  
canada.inquires@bio-techne.com

### **Bio-Techne Ltd**

19 Barton Lane  
Abingdon Science Park  
Abingdon, OX14 3NB, United Kingdom  
Phone: (44) (0) 1235 529449  
Free Phone: 0800 37 34 15  
Fax: (44) (0) 1235 533420  
info.EMEA@bio-techne.com

### **General Contact Information**

www.novusbio.com  
Technical Support: nb-technical@bio-techne.com  
Orders: nb-customerservice@bio-techne.com  
General: novus@novusbio.com

### **Products Related to NBP2-50051**

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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)
NBP1-51093-0.01mg	Recombinant Human Tau His 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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