

# Product Datasheet

## GABA-A R gamma 2 Antibody - Azide Free NB300-190

Unit Size: 0.1 ml

Store at -20C. Avoid freeze-thaw cycles.

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Updated 9/9/2025 v.20.1

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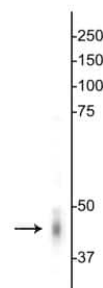
**NB300-190****GABA-A R gamma 2 Antibody - Azide Free**

<b>Product Information</b>	
<b>Unit Size</b>	0.1 ml
<b>Concentration</b>	Please see the vial label for concentration. If unlisted please contact technical services.
<b>Storage</b>	Store at -20C. Avoid freeze-thaw cycles.
<b>Clonality</b>	Polyclonal
<b>Preservative</b>	No Preservative
<b>Isotype</b>	IgG
<b>Purity</b>	Antigen Affinity-purified
<b>Buffer</b>	10mM HEPES (pH 7.5), 0.15M NaCl, 0.1 mg/ml BSA and 50% Glycerol
<b>Target Molecular Weight</b>	46 kDa
<b>Product Description</b>	
<b>Description</b>	Novus Biologicals Rabbit GABA-A R gamma 2 Antibody - Azide Free (NB300-190) is a polyclonal antibody validated for use in IHC and WB. Anti-GABA-A R gamma 2 Antibody: Cited in 14 publications. All Novus Biologicals antibodies are covered by our 100% guarantee.
<b>Host</b>	Rabbit
<b>Gene ID</b>	2566
<b>Gene Symbol</b>	GABRG2
<b>Species</b>	Human, Mouse, Rat
<b>Reactivity Notes</b>	Mouse reactivity reported in scientific literature (PMID:32732906). Mouse reactivity reported in scientific literature (PMID: 23922756). Human reactivity reported in scientific literature (PMID: 24668190).
<b>Specificity/Sensitivity</b>	Specific for endogenous levels of the ~46 kDa gamma 2-subunit of the GABAA receptor.
<b>Immunogen</b>	Fusion protein from the cytoplasmic loop of the gamma 2 subunit. Accession # P18508
<b>Product Application Details</b>	
<b>Applications</b>	Western Blot, Immunohistochemistry, Knockdown Validated
<b>Recommended Dilutions</b>	Western Blot 1:1000, Immunohistochemistry 1:100, Knockdown Validated
<b>Application Notes</b>	Use in Immunohistochemistry reported in scientific literature (PMID 25716832). Knockdown validation (PMID: 31747610).

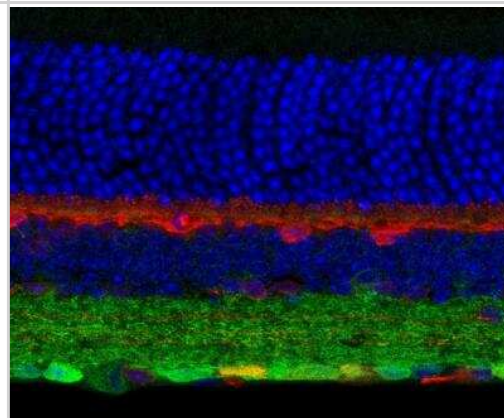


## Images

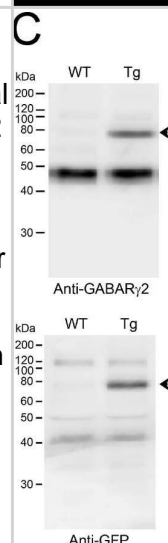
Western Blot: GABA-A R gamma 2 Antibody [NB300-190] - Mouse whole brain lysate showing specific immunolabeling of the ~46 kDa gamma-2-subunit of GABA<sub>A</sub> -R.



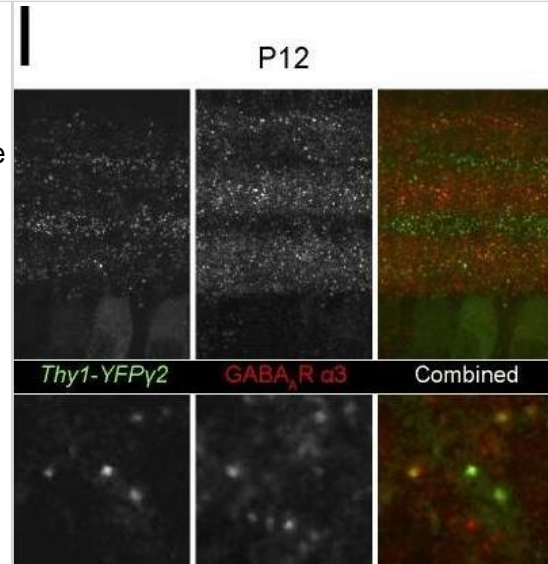
Immunohistochemistry: GABA-A R gamma 2 Antibody [NB300-190] - Immunostaining of mouse retina showing specific labeling of the GABA<sub>A</sub> gamma-2 subunit in green, calbindin in red and DNA in blue. Photo courtesy of Dr. Arlene Hirano, UCLA.



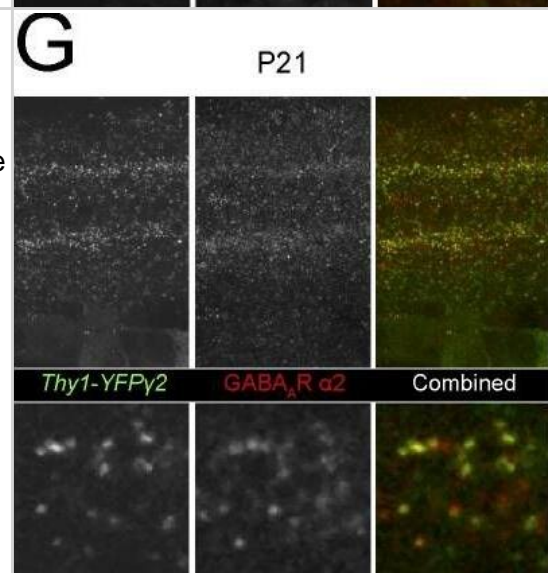
Western Blot: GABA-A R gamma 2 Antibody [NB300-190] - Pattern of YFPy2 expression in retinas of Thy1-YFPy2 transgenic mice. (A) Maximum intensity projections (MIP) of confocal image stacks (2  $\mu$ m total thickness) of vertical slices of Thy1-YFPy2 retinas at postnatal day (P)12 & P21. Diffuse fluorescence expression in cell bodies within the ganglion cell layer (GCL) at both ages, & punctate expression throughout both OFF & ON layers of the inner plexiform layer (IPL) are apparent. There was no expression in the outer plexiform layer (OPL) or the outer nuclear layer (ONL) at either age. (B) Images of MIPs (20  $\mu$ m thick) at various depths of a P21 flat mount Thy1-YFPy2 retina. Inserts are 3 $\times$  magnification of the images. (C) Western blot of whole brain lysates from Thy1-YFPy2 (Tg) & wildtype (WT) mice. YFPy2 (arrowhead) was detected with anti-GABAAR $\gamma$ 2 (upper) & anti-GFP (lower). Image collected & cropped by CiteAb from the following publication (<https://dx.plos.org/10.1371/journal.pone.0069612>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



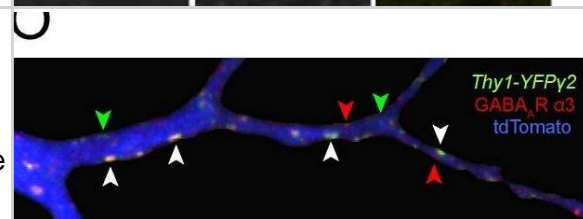
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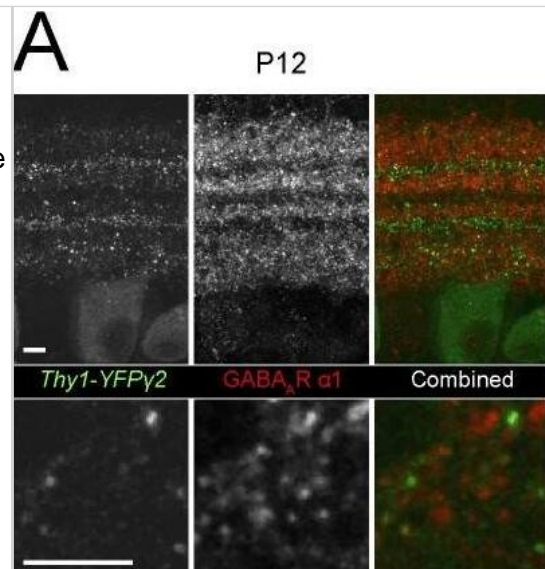
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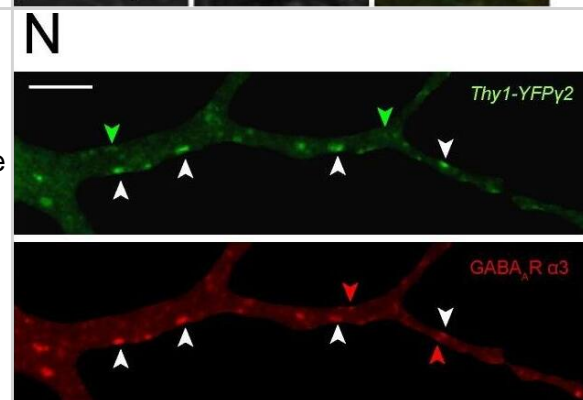
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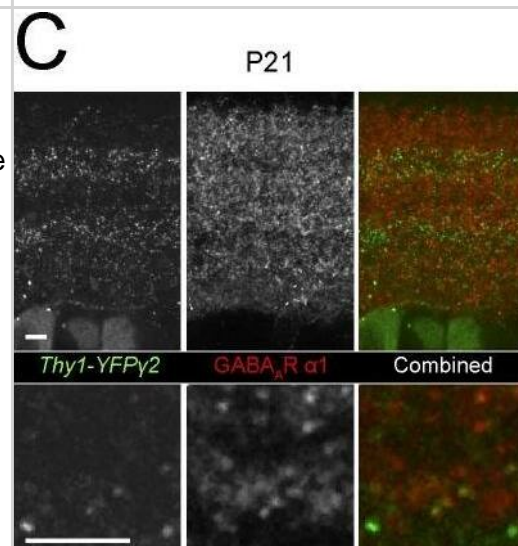
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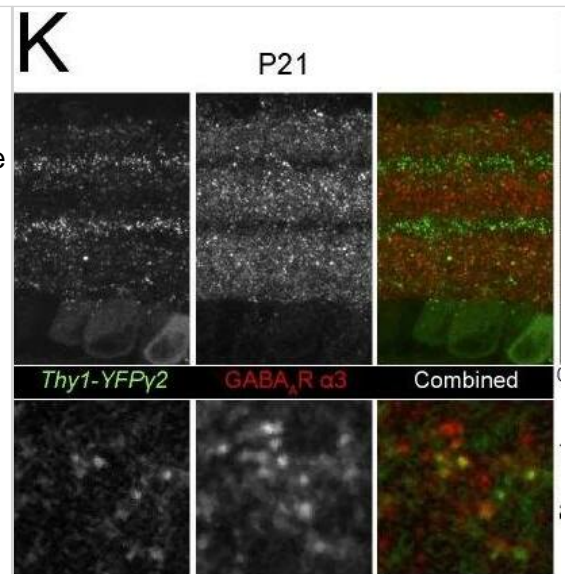
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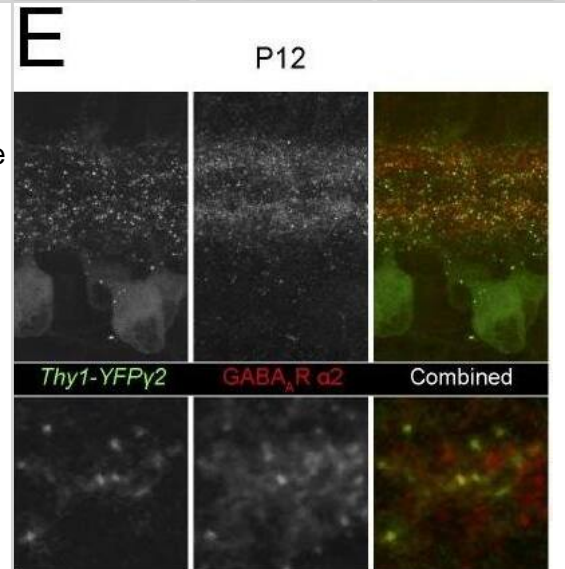
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## Publications

Chan ES, Ge Y, So YW et al. Allosteric potentiation of GABAA receptor single-channel conductance by netrin-1 during neuronal-excitation-induced inhibitory synaptic homeostasis *Cell reports* 2022-11-01 [PMID: 36323250] (WB, Mouse)

Janach G, BOhm M, DOhne N et al. Interferon-gamma enhances neocortical synaptic inhibition by promoting membrane association and phosphorylation of GABAA receptors in a protein kinase C-dependent manner *Brain, Behavior, and Immunity* 2022-01-01 [PMID: 34998939] (WB, Rat)

He Y, Cai X, Liu H Et Al. 5-HT recruits distinct neurocircuits to inhibit hunger-driven and non-hunger-driven feeding *Molecular psychiatry* 2021-07-21 [PMID: 34290371]

Kim ER, Xu Y, Cassidy RM et al. Paraventricular hypothalamus mediates diurnal rhythm of metabolism *Nat Commun* 2020-07-30 [PMID: 32732906] (IF/IHC, Mouse)

Shimell JJ, Shah BS, Cain SM et al. The X-Linked Intellectual Disability Gene *Zdhhc9* Is Essential for Dendrite Outgrowth and Inhibitory Synapse Formation *Cell Rep* 2019-11-19 [PMID: 31747610] (KD, Human, Mouse, Rat)

Dalby N, Leurs U, Falk-Petersen C et al. Kinase activity simultaneously determines the constitutive and the orthosteric gating in alpha4beta1/3delta GABAA receptors in hippocampal granule cells *bioRxiv* 2018-05-09

Fan J, Li D, Chen HS et al. Metformin Produces Anxiolytic-like Effects in Rats by Facilitating GABAA Receptor Trafficking to Membrane. *Br. J. Pharmacol.* 2018-10-14 [PMID: 30318707] (WB, Rat)

Huang S, Hokenson K, Bandyopadhyay S et al. Brief Dark Exposure Reduces Tonic Inhibition in Visual Cortex. *J. Neurosci.* 2015-12-02 [PMID: 26631472] (WB, Mouse)

Johnson AC, Nagle KJ, Tremble SM, Cipolla MJ. The Contribution of Normal Pregnancy to Eclampsia. *PLoS ONE.* 2015-07-29 [PMID: 26218425] (WB, Rat)

Joshi S, Sun C, Kapur J. A mouse monoclonal antibody against the gamma2 subunit of GABAA receptors. *Hybridoma (Larchmt)* 2011-12-01 [PMID: 22149279]

Wu Z, Kim ER, Sun H et al. GABAergic projections from lateral hypothalamus to paraventricular hypothalamic nucleus promote feeding *J. Neurosci.* 2015-02-25 [PMID: 25716832] (IF/IHC, Mouse)

Fatemi SH, Reutiman TJ, Folsom TD et al. Downregulation of GABAA Receptor Protein Subunits alpha6, beta2, delta, epsilon, gamma2, theta, and p2 in Superior Frontal Cortex of Subjects with Autism. *J Autism Dev Disord* 2014-03-26 [PMID: 24668190] (WB, Human)

More publications at <http://www.novusbio.com/NB300-190>





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Orders: nb-customerservice@bio-techne.com  
General: novus@novusbio.com

### **Products Related to NB300-190**

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NBP2-33376H	Blue Marker Antibody (6F4-F6) [HRP]
HAF008	Goat anti-Rabbit IgG Secondary Antibody [HRP]
NB7160	Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]
NBP2-24891	Rabbit IgG Isotype Control

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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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