

# Product Datasheet

## Glycogen Phosphorylase BB/GPBB Antibody NBP1-32799

Unit Size: 0.1 ml

Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.

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**Publications: 18**

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**NBP1-32799****Glycogen Phosphorylase BB/GPBB Antibody**

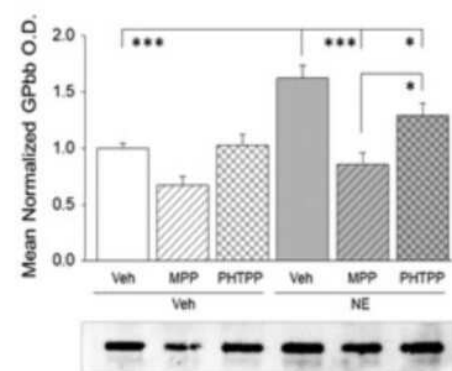
Product Information	
Unit Size	0.1 ml
Concentration	Concentrations vary lot to lot. See vial label for concentration. If unlisted please contact technical services.
Storage	Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.025% Proclin 300
Isotype	IgG
Purity	Antigen Affinity-purified
Buffer	PBS (pH 7), 20% Glycerol, 1% BSA
Target Molecular Weight	97 kDa

Product Description	
Description	Novus Biologicals Rabbit Glycogen Phosphorylase BB/GPBB Antibody (NBP1-32799) is a polyclonal antibody validated for use in IHC and WB. Anti-Glycogen Phosphorylase BB/GPBB Antibody: Cited in 18 publications. All Novus Biologicals antibodies are covered by our 100% guarantee.
Host	Rabbit
Gene ID	5834
Gene Symbol	PYGB
Species	Human, Mouse
Reactivity Notes	Rat reactivity reported in scientific literature (PMID: 30954669). Immunogen displays the following percentage of sequence identity for non-tested species: Zebrafish (85%), Chicken (86%).
Immunogen	Recombinant protein encompassing a sequence within the C-terminus region of human Glycogen Phosphorylase BB/GPBB. The exact sequence is proprietary.

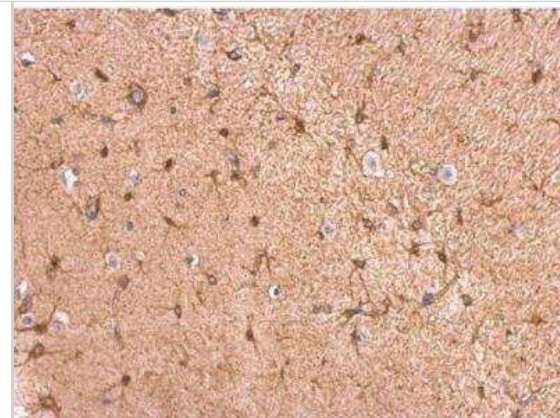
Product Application Details	
Applications	Western Blot, Immunohistochemistry-Paraffin, Immunohistochemistry
Recommended Dilutions	Western Blot 1:500-1:3000, Immunohistochemistry 1:100-1:1000, Immunohistochemistry-Paraffin 1:100-1:1000

**Images**

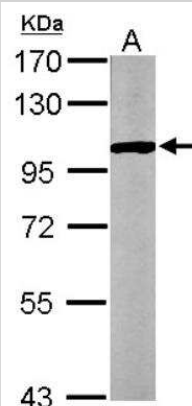
Western Blot: Glycogen Phosphorylase BB/GPBB Antibody [NBP1-32799] - ER alpha and ER beta Involvement in Noradrenergic Regulation of VMN Glycogen Phosphorylase BB/GPBB Protein Expression. Micropunch-dissected VMN tissue obtained from groups of female rats (n=6/group) infused into the VMN with Veh or NE after Veh, MPP, or PHTPP pretreatment was analyzed by Western blot for GPbb, F(5, 12)=12.90, p<.0001. Data show mean normalized protein optical density (O.D.) values+/-SEM. \*p<.05; \*\*p<.01; \*\*\*p<.001. Image collected and cropped by CiteAb from the following publication (<https://pubmed.ncbi.nlm.nih.gov/32233668/>) licensed under a CC-BY license.

**5B VMN GPbb**

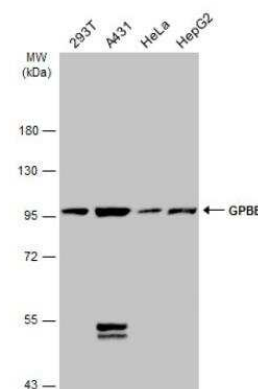
Immunohistochemistry-Paraffin: Glycogen Phosphorylase BB/GPBB Antibody [NBP1-32799] - Mouse fore brain. GPBB antibody dilution: 1:500. Antigen Retrieval: Trilogy™ (EDTA based, pH 8.0) buffer, 15min.



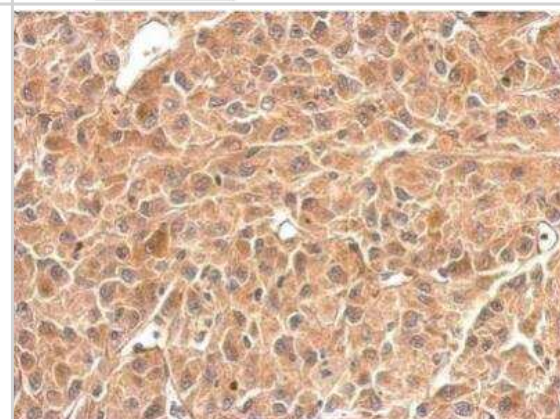
Western Blot: Glycogen Phosphorylase BB/GPBB Antibody [NBP1-32799] - Sample (50 ug of whole cell lysate) A: Mouse brain 7. 5% SDS PAGE; antibody diluted at 1:1000.



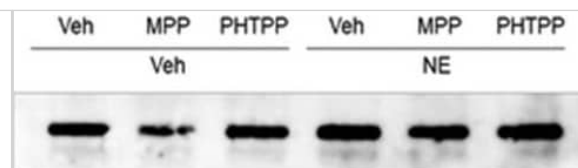
Western Blot: Glycogen Phosphorylase BB/GPBB Antibody [NBP1-32799] - Various whole cell extracts (30 ug) were separated by 7.5% SDS-PAGE, and the membrane was blotted with GPBB antibody diluted at 1:1000. The HRP-conjugated anti-rabbit IgG antibody (NBP2-19301) was used to detect the primary antibody.



Immunohistochemistry-Paraffin: Glycogen Phosphorylase BB/GPBB Antibody [NBP1-32799] - U87 xenograft. GPBB antibody dilution: 1:500. Antigen Retrieval: Trilogy™ (EDTA based, pH 8.0) buffer, 15min.



Western Blot: Glycogen Phosphorylase BB/GPBB Antibody [NBP1-32799] - ER $\alpha$  & ER $\beta$  Involvement in Noradrenergic Regulation of VMN GS & GPbb/GPmm Protein Expression. Micropunch-dissected VMN tissue obtained from groups of female rats (n = 6/group) infused into the VMN with Veh or NE after Veh, MPP, or PHTPP pretreatment was analyzed by Western blot for GS (Panel 5A), F(5, 12) = 8.44, p = .0003; GPbb (Panel 5B), F(5, 12) = 12.90, p < .0001; or GPmm (Panel 5C), F(5, 12) = 16.49, p < .0001 protein content. Data show mean normalized protein optical density (O.D.) values  $\pm$  SEM. \*p < .05; \*\*p < .01; \*\*\*p < .001. VMN = ventromedial hypothalamic nucleus; GS = glycogen synthase; GPmm = glycogen phosphorylase-muscle type; GPbb = glycogen phosphorylase-brain type; MPP = 1,3-Bis(4-hydroxyphenyl)-4-methyl-5-[4-(2-piperidinylethoxy)phenol]-1H-pyrazole dihydrochloride; PHTPP = 4-[2-phenyl-5,7-bis(trifluoromethyl)pyrazolo[1,5-a]pyrimidin-3-yl]phenol; NE = norepinephrine. Image collected & cropped by CiteAb from the following publication (<https://pubmed.ncbi.nlm.nih.gov/32233668>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



## Publications

Alhamyani A, Mahmood ASMH, Alshamrani A et al. Central Type II Glucocorticoid Receptor Regulation of Ventromedial Hypothalamic Nucleus Glycogen Metabolic Enzyme and Glucoregulatory Neurotransmitter Marker Protein Expression in the Male Rat J Endocrinol Diabetes 2021-01-13 [PMID: 34258390] (Western Blot, Rat)

Uddin MM, Ibrahim MMH, Briski KP. Glycogen Phosphorylase Isoform Regulation of Ventromedial Hypothalamic Nucleus Gluco-Regulatory Neuron 5'-AMP-Activated Protein Kinase and Transmitter Marker Protein Expression ASN neuro 2021-10-01 [PMID: 34596459] (Western Blot, Rat)

Ibrahim MMH, Bheemanapally K, Sylvester PW, Briski KP. Norepinephrine Regulation of Adrenergic Receptor Expression, 5' AMP-Activated Protein Kinase Activity, and Glycogen Metabolism and Mass in Male Versus Female Hypothalamic Primary Astrocyte Cultures ASN Neuro 2020-11-12 [PMID: 33176438] (Western Blot, Rat)

Bheemanapally K, Alhamyani A, Alshamrani AA et al. Hypoglycemic and posthypoglycemic patterns of glycogen phosphorylase isoform expression in the ventrolateral ventromedial hypothalamic nucleus: impact of sex and estradiol Acta Neurobiologiae Experimentalis 2021-01-01 [PMID: 34170267] (Western Blot, Rat)

Uddin MM, Ali MH, Mahmood ASMH et al. Glycogen phosphorylase isoenzyme GPbb versus GPmm regulation of ventromedial hypothalamic nucleus glucoregulatory neurotransmitter and counter-regulatory hormone profiles during hypoglycemia: Role of L-lactate and octadecaneuropeptide Molecular and cellular neurosciences 2023-05-31 [PMID: 37268282]

Briski KP, Napit PR, Alhamyani A et al. Sex-Dimorphic Octadecaneuropeptide (ODN) Regulation of Ventromedial Hypothalamic Nucleus Glucoregulatory Neuron Function and Counterregulatory Hormone Secretion ASN neuro 2023-05-17 [PMID: 37194319] (WB, Rat)

Briski KP, Mahmood ASMH, Uddin MM et al. Effects of Ventromedial Hypothalamic Nucleus (VMN) Aromatase Gene Knockdown on VMN Glycogen Metabolism and Glucoregulatory Neurotransmission Biology 2023-02-03 [PMID: 36829519] (Western Blot, Rat)

Pasula MB, Napit PR, Alhamyani A et al. Sex Dimorphic Glucose Transporter-2 Regulation of Hypothalamic Astrocyte Glucose and Energy Sensor Expression and Glycogen Metabolism Neurochemical research 2022-09-29 [PMID: 36173588]

Briski K, Napit P, Haider Ali M et al. Hindbrain Catecholamine Regulation of Ventromedial Hypothalamic Nucleus Glycogen Metabolism during Acute Versus Recurring Insulin-Induced Hypoglycemia in Male versus Female Rat Endocr Metab Sci 2021-05-17 [PMID: 33997825]

Alhamyani A, Napit PR, Bheemanapally K et al. Glycogen phosphorylase isoform regulation of glucose and energy sensor expression in male versus female rat hypothalamic astrocyte primary cultures Molecular and cellular endocrinology 2022-06-16 [PMID: 35718260]

Briski, K P & Mandal, S K. Hindbrain metabolic deficiency regulates ventromedial hypothalamic nucleus glycogen metabolism and glucose regulatory signaling. Acta Neurobiol Exp (Wars) 2020-03-28 [PMID: 32214275] (WB, Mouse)

Uddin MM, Ibrahim MMH, Briski KP Sex-dimorphic neuroestradiol regulation of ventromedial hypothalamic nucleus glucoregulatory transmitter and glycogen metabolism enzyme protein expression in the rat BMC Neurosci 2020-11-25 [PMID: 33238883] (WB, Human)

More publications at <http://www.novusbio.com/NBP1-32799>





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### **Products Related to NBP1-32799**

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HAF008	Goat anti-Rabbit IgG Secondary Antibody [HRP]
NB7160	Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]
NBP2-24891	Rabbit IgG Isotype Control
H00005834-P01-10ug	Recombinant Human Glycogen Phosphorylase BB/GPBB 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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