Product Datasheet

Glycogen phosphorylase, muscle form Antibody - BSA Free

NBP2-16689

Unit Size: 0.1 ml

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

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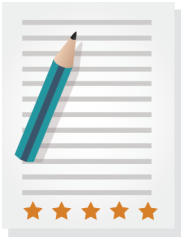
Updated 2/23/2025 v.20.1



NBP2-16689

Glycogen phosphorylase, muscle form Antibody - BSA Free

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, 20% Glycerol
Target Molecular Weight	97 kDa

Product Description

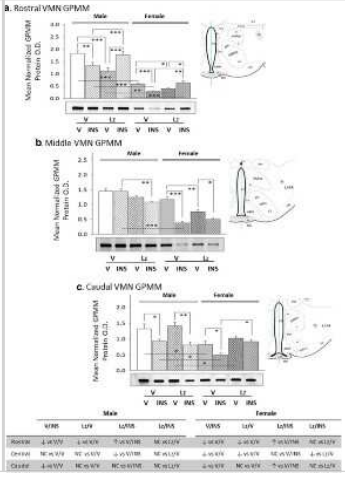
Host	Rabbit
Gene ID	5837
Gene Symbol	PYGM
Species	Human, Mouse, Zebrafish
Reactivity Notes	Xenopus laevis (84%). Rat reactivity reported in scientific literature (PMID: 30660767).
Immunogen	Recombinant protein encompassing a sequence within the center region of human Glycogen phosphorylase, muscle form. The exact sequence is proprietary.

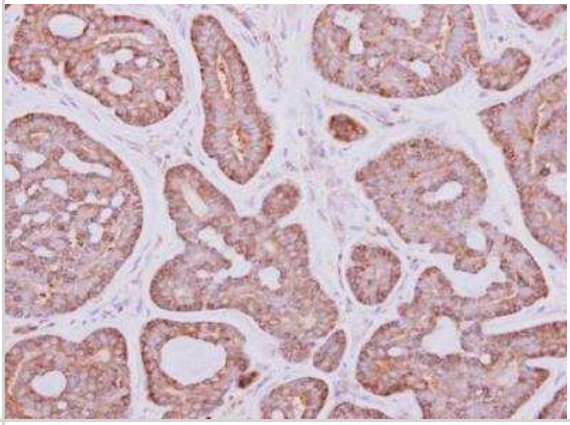
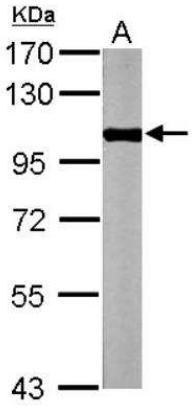
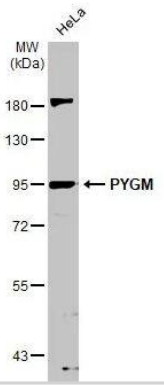
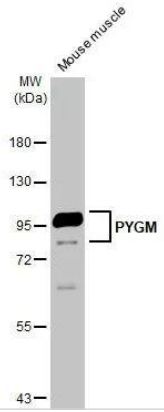
Product Application Details

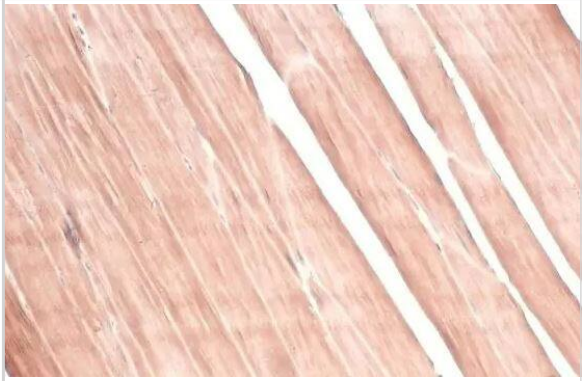
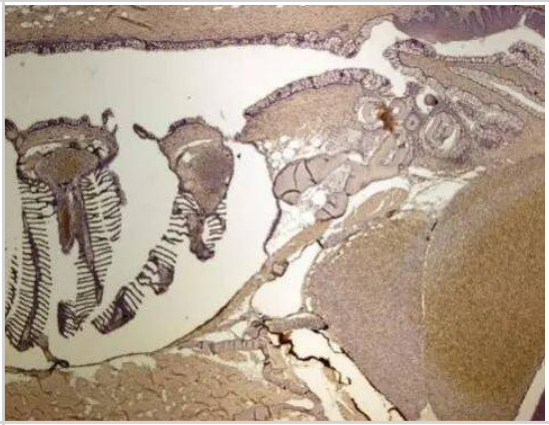
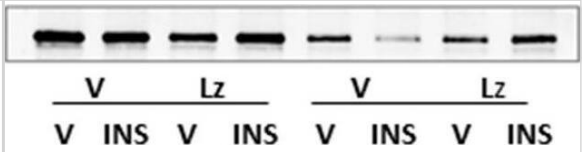
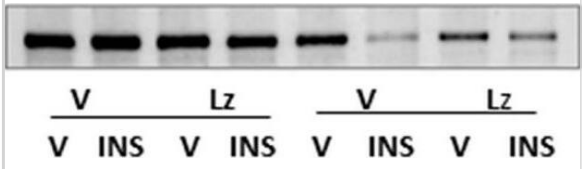
Applications	Western Blot, Immunohistochemistry, Immunohistochemistry-Paraffin
Recommended Dilutions	Western Blot 1:500-1:3000, Immunohistochemistry 1:100-1:1000, Immunohistochemistry-Paraffin 1:100-1:1000

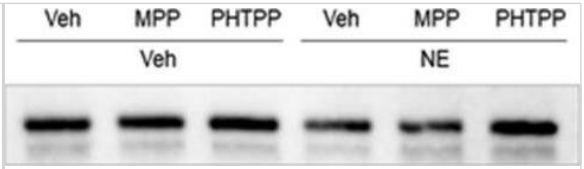
Images

Western Blot: Glycogen phosphorylase, muscle form Antibody [NBP2-16689] - Region-based patterns of glycogen phosphorylase, muscle form (GPmm) Protein expression inicvLz-pretreated male and female rats. GPmm protein was measured by Western blot in the rostral (a; F (7,40)=35.87; p<0.0001), middle (b; F(7,40)=33.89; p<0.0001), and caudal (c; F(7,40)=9.43; p<0.0001) VMN of V/V, V/INS, Lz/V, and Lz/INS groups of male (M; left-hand side) and female (F; right-hand side) rats. *p<0.05; **p<0.01; ***p<0.001; ****p<0.0001. For each VMN segment, data depict mean normalized GAD O.D. valuesS.E.M. Results are summarized in the table at bottom. VMN = Ventromedial hypothalamic nucleus; V = Vehicle; LZ = letrozole; INS = insulin. Image collected and cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/33238883/) licensed under a CC-BY license.



Immunohistochemistry-Paraffin: Glycogen phosphorylase, muscle form Antibody [NBP2-16689] - Human breast cancer. PYGM antibody [C1C3] dilution: 1:500. Antigen Retrieval: Trilogy™ (EDTA based, pH 8.0) buffer, 15min.	
Western Blot: Glycogen phosphorylase, muscle form Antibody [NBP2-16689] - Sample (50 ug of whole cell lysate) A: Mouse brain 7.5% SDS PAGE diluted at 1:1000	
Western Blot: Glycogen phosphorylase, muscle form Antibody [NBP2-16689] -Whole cell extract (30 ug) was separated by 7.5% SDS-PAGE, and the membrane was blotted with PYGM antibody [C1C3] diluted at 1:1000. The HRP-conjugated anti-rabbit IgG antibody (NBP2-19301) was used to detect the primary antibody.	
Western Blot: Glycogen phosphorylase, muscle form Antibody [NBP2-16689] -Mouse tissue extract (50 ug) was separated by 7.5% SDS-PAGE, and the membrane was blotted with PYGM antibody [C1C3] diluted at 1:10000. The HRP-conjugated anti-rabbit IgG antibody (GTX213110-01) was used to detect the primary antibody.	

Immunohistochemistry-Paraffin: Glycogen phosphorylase, muscle form Antibody [NBP2-16689] - Mouse muscle. PYGM stained by PYGM antibody [C1C3] diluted at 1:500. Antigen Retrieval: Citrate buffer, pH 6.0, 15 min.	
Immunohistochemistry-Paraffin: Glycogen phosphorylase, muscle form Antibody [NBP2-16689] -Analysis of paraffin-embedded zebrafish tissue, using PYGM antibody [C1C3] at 1:300 dilution.	
Western Blot: Glycogen phosphorylase, muscle form Antibody [NBP2-16689] - Region-based patterns of glycogen phosphorylase-muscle type (GPmm) Protein expression in icv Lz-pretreated male & female rats. GPmm protein was measured by Western blot in the rostral (a; $F(7,40) = 35.87$; $p < 0.0001$), middle (b; $F(7,40) = 33.89$; $p < 0.0001$), & caudal (c; $F(7,40) = 9.43$; $p < 0.0001$) VMN of V/V, V/INS, Lz/V, & Lz/INS groups of male (M; left-hand side) & female (F; right-hand side) rats. *$p < 0.05$; **$p < 0.01$; ***$p < 0.001$; ****$p < 0.0001$. For each VMN segment, data depict mean normalized GAD O.D. values ± S.E.M. Results are summarized in the table at bottom; ↑ & ↓ denote a relative increase or decrease, respectively, between treatment groups; no change (NC) between groups is also indicated Image collected & cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/33238883), licensed under a CC-BY license. Not internally tested by Novus Biologicals.	
Western Blot: Glycogen phosphorylase, muscle form Antibody [NBP2-16689] - Region-based patterns of glycogen phosphorylase-muscle type (GPmm) Protein expression in icv Lz-pretreated male & female rats. GPmm protein was measured by Western blot in the rostral (a; $F(7,40) = 35.87$; $p < 0.0001$), middle (b; $F(7,40) = 33.89$; $p < 0.0001$), & caudal (c; $F(7,40) = 9.43$; $p < 0.0001$) VMN of V/V, V/INS, Lz/V, & Lz/INS groups of male (M; left-hand side) & female (F; right-hand side) rats. *$p < 0.05$; **$p < 0.01$; ***$p < 0.001$; ****$p < 0.0001$. For each VMN segment, data depict mean normalized GAD O.D. values ± S.E.M. Results are summarized in the table at bottom; ↑ & ↓ denote a relative increase or decrease, respectively, between treatment groups; no change (NC) between groups is also indicated Image collected & cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/33238883), licensed under a CC-BY license. Not internally tested by Novus Biologicals.	



Western Blot: Glycogen phosphorylase, muscle form Antibody [NBP2-16689] - ERα & ERβ 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 ± 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

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]

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]

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)

Bheemanapally K, Alhamyani A, Alshamrani AA et al. Hypoglycemic and post?hypoglycemic 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)

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]

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] (IF/IHC, Green monkey)

Mahmood A S M H, Napit P R et al. Estrogen Receptor Involvement in Noradrenergic Regulation of Ventromedial Hypothalamic Nucleus Glucoregulatory Neurotransmitter and Stimulus-Specific Glycogen Phosphorylase Enzyme Isoform Expression. ASN Neuro 2020-03-04 [PMID: 32233668] (WB, Rat)

Bheemanapally K, Ibrahim MMH, Briski KP Combinatory high-resolution microdissection/ultra performance liquid chromatographic-mass spectrometry approach for small tissue volume analysis of rat brain glycogen J Pharm Biomed Anal 2019-09-30 [PMID: 31606560] (WB, Rat)

Briski K, Mandal S Hindbrain lactoprivic regulation of hypothalamic neuron transactivation and gluco-regulatory neurotransmitter expression: Impact of antecedent insulin-induced hypoglycemia Neuropeptides 2019-08-01 [PMID: 31488323] (WB, Rat)

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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

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H00005837-Q01-10ug	Recombinant Human Glycogen phosphorylase, muscle form GST (N-Term) Protein

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