

# Product Datasheet

## GLS2 Antibody - BSA Free NBP1-76544

Unit Size: 0.1 mg

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: 8

Protocols, Publications, Related Products, Reviews, Research Tools and Images at:  
[www.novusbio.com/NBP1-76544](http://www.novusbio.com/NBP1-76544)

Updated 9/9/2025 v.20.1

Earn rewards for product  
reviews and publications.

Submit a publication at [www.novusbio.com/publications](http://www.novusbio.com/publications)

Submit a review at [www.novusbio.com/reviews/destination/NBP1-76544](http://www.novusbio.com/reviews/destination/NBP1-76544)



**NBP1-76544**

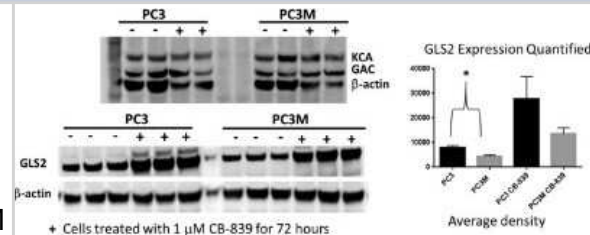
GLS2 Antibody - BSA Free

Product Information	
Unit Size	0.1 mg
Concentration	1 mg/ml
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.02% Sodium Azide
Isotype	IgG
Purity	Immunogen affinity purified
Buffer	PBS
Target Molecular Weight	66 kDa
Product Description	
Description	Novus Biologicals Rabbit GLS2 Antibody - BSA Free (NBP1-76544) is a polyclonal antibody validated for use in IHC, WB, ELISA, ICC/IF and Simple Western. Anti-GLS2 Antibody: Cited in 8 publications. All Novus Biologicals antibodies are covered by our 100% guarantee.
Host	Rabbit
Gene ID	27165
Gene Symbol	GLS2
Species	Human, Mouse, Rat
Reactivity Notes	Use in Human reported in scientific literature (PMID:33799686).
Specificity/Sensitivity	Specificity for GLS2 versus GLS1 has not been determined.
Immunogen	Antibody was raised against a 18 amino acid peptide near the center terminus of human GLS2 (NP_037399).
Product Application Details	
Applications	Western Blot, Simple Western, Immunohistochemistry-Paraffin, ELISA, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry
Recommended Dilutions	Western Blot 0.5-1 ug/ml, Simple Western 1:100, ELISA 1:100-1:2000, Immunohistochemistry 5 ug/ml, Immunocytochemistry/ Immunofluorescence 20 ug/mL, Immunohistochemistry-Paraffin 5 ug/ml
Application Notes	In Simple Western only 10 - 15 uL of the recommended dilution is used per data point. See <a href="#">Simple Western Antibody Database</a> for Simple Western validation: Tested in Hek293 lysate 0.5 mg/mL, separated by Size, antibody dilution of 1:100, apparent MW was 60 kDa. Separated by Size-Wes, Sally Sue/Peggy Sue. The observed molecular weight of the protein may vary from the listed predicted molecular weight due to post translational modifications, post translation cleavages, relative charges, and other experimental factors.

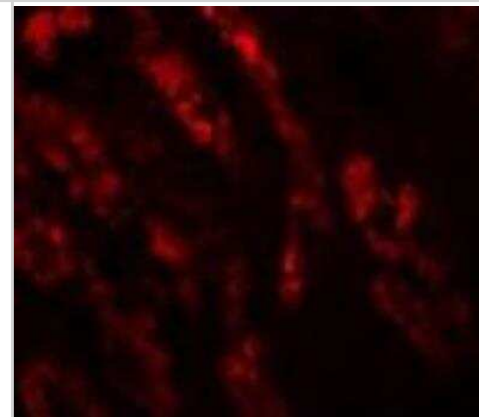


## Images

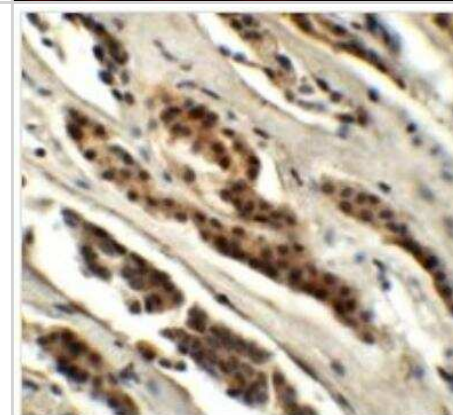
**Western Blot: GLS2 Antibody [NBP1-76544] - Glutaminase protein expression in PC3 and PC3M cell lines before/after CB-839 treatment.** PC3 & PC3M cells were treated (+) or not treated (-) with GLS1 inhibitor CB-839 (1  $\mu$ M) and their expression of GLS1 & GLS2 proteins determined by Western blot. Antibodies specific for GAC & KGA were utilized on two replicate samples, while GLS2 expression was determined on three. PC3 cell lysates expressed GLS2 more than PC3M cell lysates regardless of CB-839 treatment. The difference in GLS2 expression was significant in the untreated cells ( $P < 0.03$ ) but because of high variability the difference was not significant in the drug-treated cells. Levels of GLS1 (GAC and KGA) were similar in all cell lysates. Image collected and cropped by CiteAb from the following publication (<https://www.nature.com/articles/s41598-017-16327-z>), licensed under a CC-BY license.



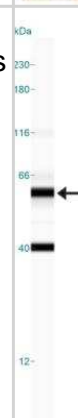
**Immunocytochemistry/Immunofluorescence: GLS2 Antibody [NBP1-76544] - of GLS2 in Human Kidney cells.** Dilution 20  $\mu$ g/mL.



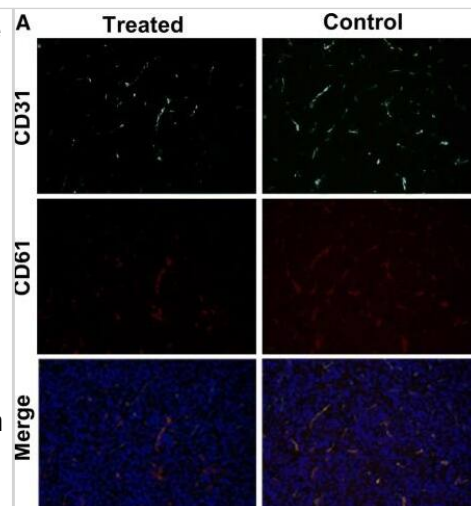
**Immunohistochemistry: GLS2 Antibody [NBP1-76544] - Immunohistochemistry of GLS2 in human kidney tissue with GLS2 antibody at 5  $\mu$ g/mL.**



**Simple Western: GLS2 Antibody [NBP1-76544] - Simple Western lane view shows a specific band for GLS2 in 0.5 mg/ml of Hek293 lysate.** This experiment was performed under reducing conditions using the 12-230 kDa separation system.



Immunocytochemistry/ Immunofluorescence: GLS2 Antibody - BSA Free [NBP1-76544] - Histological analyses for assessing response to bevacizumab treatment. A Immunofluorescence staining of tumor vasculature & integrin  $\beta 3$  with antibodies against CD31 (green) & CD61 (integrin  $\beta 3$ , red) in the treated & control groups at the end of the study. B Quantitative analysis of integrin  $\beta 3$  & CD31-positive area fraction of tumors between the control & treatment groups.  $**P < 0.05$ . Magnification:  $\times 200$ . Microvascular density (CD31) from the therapy group (C) & control group (D). Tumor cell proliferation (Ki-67) from the therapy group (F) & control group (G). Quantitative MVD (E) & Ki67 (H) assessment of therapy & control group. Error bars denote standard errors, Mann–Whitney U-test were applied,  $**P < 0.05$ . Magnification:  $\times 200$  Image collected & cropped by CiteAb from the following publication (<https://pubmed.ncbi.nlm.nih.gov/31604441>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



## Publications

Cavino K, Sung B, Su Q, Na E et al. Glucagon Receptor Inhibition Reduces Hyperammonemia and Lethality in Male Mice with Urea Cycle Disorder *Endocrinology* 2020-11-18 [PMID: 33206168]

Emmanuel Benichou, Bolaji Seffou, Selin Topçu, Ophélie Renoult, Véronique Lenoir, Julien Planchais, Caroline Bonner, Catherine Postic, Carina Prip-Buus, Claire Pecqueur, Sandra Guilmeau, Marie-Clotilde Alves-Guerra, Renaud Dentin The transcription factor ChREBP Orchestrates liver carcinogenesis by coordinating the PI3K/AKT signaling and cancer metabolism *Nature Communications* 2024-02-29 [PMID: 38424041]

Arenas YM, Felipe V Sustained Hyperammonemia Activates NF- $\kappa$ B in Purkinje Neurons Through Activation of the TrkB-PI3K-AKT Pathway by Microglia-Derived BDNF in a Rat Model of Minimal Hepatic Encephalopathy *Molecular neurobiology* 2023-02-15 [PMID: 36790604] (Western Blot)

Mao X, Chen H, Lin A et al. Glutaminase 2 Knockdown Reduces Hyperammonemia and Associated Lethality of Urea Cycle Disorder Mouse Model *Journal of inherited metabolic disease* 2022-01-06 [PMID: 34988999] (WB, Mouse)

Zacharias N, Wang L, Maity T et al. Prolyl Hydroxylase 3 Knockdown Accelerates VHL-Mutant Kidney Cancer Growth In Vivo *International Journal of Molecular Sciences* 2021-03-11 [PMID: 33799686] (WB, Human)

Wang Y, Liu H, Yao D et al. 18F-labeled magnetic nanoparticles for monitoring anti-angiogenic therapeutic effects in breast cancer xenografts *J Nanobiotechnology* 2019-10-11 [PMID: 31604441] (IHC-P, Mouse)

Zacharias NM, McCullough C, Shanmugavelandy S et al. Metabolic Differences in Glutamine Utilization Lead to Metabolic Vulnerabilities in Prostate Cancer *Sci Rep.* 2017-11-23 [PMID: 29170516] (WB, Human)

Gross MI, Demo SD, Dennison JB et al. Antitumor Activity of the Glutaminase Inhibitor CB-839 in Triple-Negative Breast Cancer. *Mol. Cancer Ther.* 2014-02-13 [PMID: 24523301] (WB, Human)



### **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 NBP1-76544**

---

NBP1-76544PEP-0.1mg	GLS2 Antibody Blocking Peptide
HAF008	Goat anti-Rabbit IgG Secondary Antibody [HRP]
NB7160	Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]
NBP2-24891	Rabbit IgG Isotype Control

---

### **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.

For more information on our 100% guarantee, please visit [www.novusbio.com/guarantee](http://www.novusbio.com/guarantee)

Earn gift cards/discounts by submitting a review: [www.novusbio.com/reviews/submit/NBP1-76544](http://www.novusbio.com/reviews/submit/NBP1-76544)

Earn gift cards/discounts by submitting a publication using this product:  
[www.novusbio.com/publications](http://www.novusbio.com/publications)

