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.

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Publications: 6

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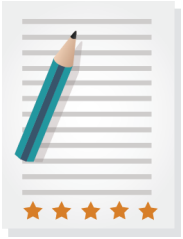
Updated 12/20/2023 v.20.1



NBP1-76544

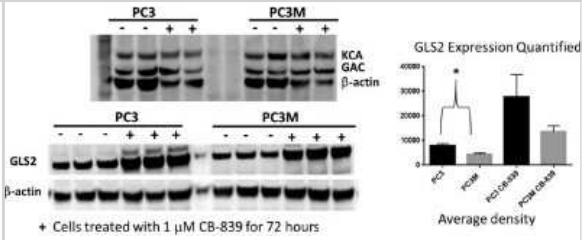
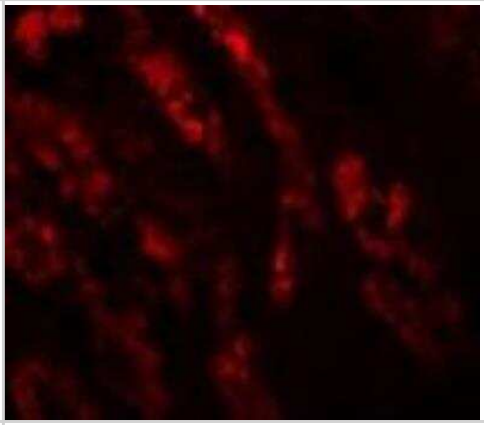
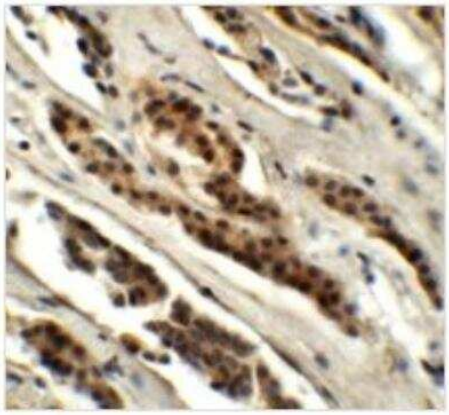
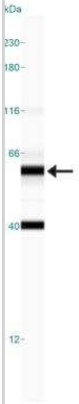
GLS2 Antibody - BSA Free

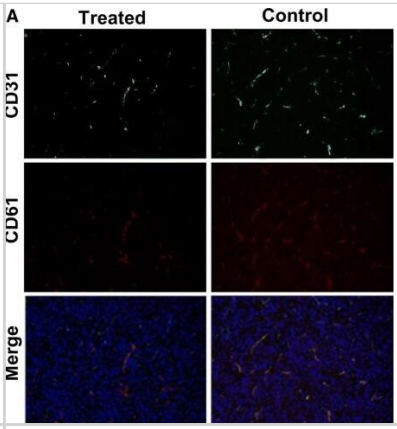
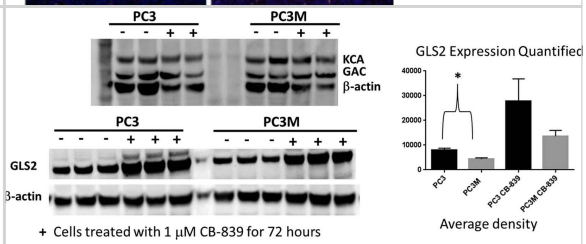
Product Information	
Unit Size	0.1 mg
Concentration	1 mg/ml
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.02% Sodium Azide
Isotype	IgG
Purity	Immunogen affinity purified
Buffer	PBS
Target Molecular Weight	66 kDa

Product Description	
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, ELISA, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Paraffin
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. 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 uM) and their expression of GLS1 & GLS2 proteins determined by Western blot. Antibodies specific for GAC & KCA 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 ug/mL.	
Immunohistochemistry: GLS2 Antibody [NBP1-76544] - Immunohistochemistry of GLS2 in human kidney tissue with GLS2 antibody at 5 ug/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.	

Histological analyses for assessing response to bevacizumab treatment. A) Immunofluorescence staining of tumor vasculature and integrin beta3 with antibodies against CD31 (green) and CD61 (integrin beta3, red) in the treated and control groups at the end of the study. Image collected and cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/31604441), licensed under a CC-BY licence.	
Glutaminase protein expression in PC3 and PC3M cell lines before and after CB-839 treatment. PC3 and PC3M cells were treated (+) or not treated (-) with GLS1 inhibitor CB-839 (1 uM) and their expression of GLS1 and GLS2 proteins were determined by Western blot. Antibodies specific for GAC and KCA were utilized on two replicate samples, while GLS2 expression was determined on three replicates. PC3 cell lysates had higher levels of expression of GLS2 than PC3M cell lysates regardless of CB-839 treatment. The average density of bands in the GLS2 blots were determined by using ImageJ software. The statistical significance was determined by unpaired two-tailed t-test. 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. The full gels can be seen in the supplemental data. Image collected and cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/29170516), licensed under a CC-BY licence.	

Publications

Arenas YM, Felipo V Sustained Hyperammonemia Activates NF-?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] (WB)

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)

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

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