

# Product Datasheet

## Glut4 Antibody (3G10A3) - BSA Free NBP2-22214

Unit Size: 0.1 ml

Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.

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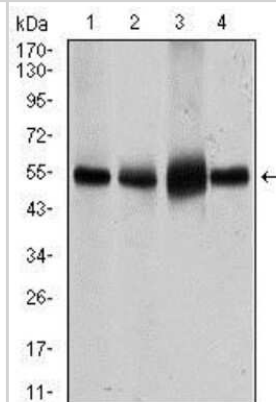
**NBP2-22214**

Glut4 Antibody (3G10A3) - BSA Free

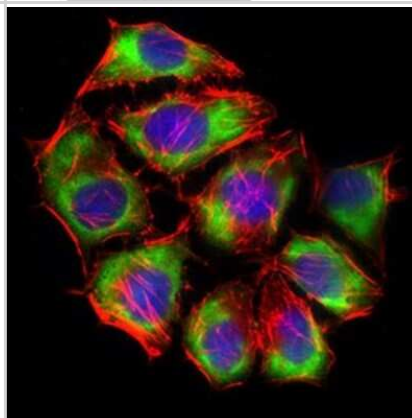
Product Information	
Unit Size	0.1 ml
Concentration	1 mg/ml
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Monoclonal
Clone	3G10A3
Preservative	0.05% Sodium Azide
Isotype	IgG2b
Purity	Protein G purified
Buffer	PBS
Target Molecular Weight	54.8 kDa
Product Description	
Description	Novus Biologicals Mouse Glut4 Antibody (3G10A3) - BSA Free (NBP2-22214) is a monoclonal antibody validated for use in IHC, WB, ELISA, Flow and ICC/IF. Anti-Glut4 Antibody: Cited in 1 publication. All Novus Biologicals antibodies are covered by our 100% guarantee.
Host	Mouse
Gene ID	6517
Gene Symbol	SLC2A4
Species	Human, Mouse
Reactivity Notes	Please note that this antibody is reactive to Mouse and derived from the same host, Mouse. Mouse-On-Mouse blocking reagent may be needed for IHC and ICC experiments to reduce high background signal. You can find these reagents under catalog numbers PK-2200-NB and MP-2400-NB. Please contact Technical Support if you have any questions.
Immunogen	Purified recombinant fragment of human Glut4 (AA: 224-353) expressed in E. Coli.
Product Application Details	
Applications	Western Blot, Immunohistochemistry-Paraffin, ELISA, Flow Cytometry, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, CyTOF-ready
Recommended Dilutions	Western Blot 1:500-1:2000, Flow Cytometry 1:200-1:400, ELISA 1:10000, Immunohistochemistry 1:10-1:500, Immunocytochemistry/ Immunofluorescence 1:200-1:1000, Immunohistochemistry-Paraffin 1:200-1:1000, CyTOF-ready
Application Notes	This antibody is Cytof ready.

## Images

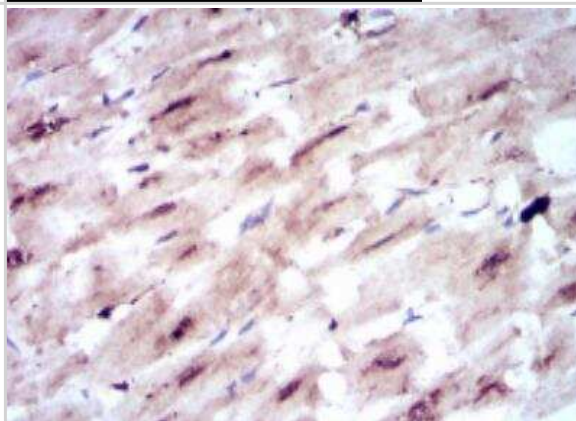
Western Blot: Glut4 Antibody (3G10A3) [NBP2-22214] - Western blot analysis using Glucose Transporter GLUT4 mouse mAb against HeLa (1), NIH3T3 (2), 3T3-L1 (3) cell lysate and Mouse heart (4) tissue lysate.



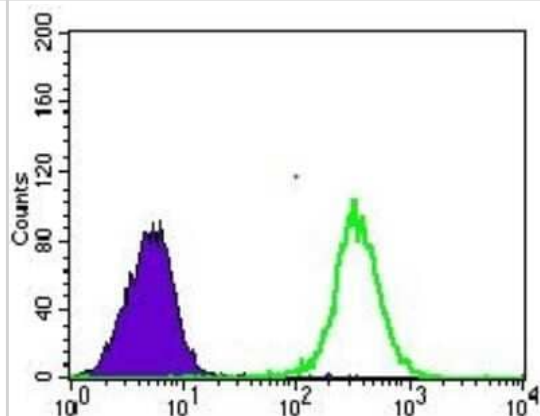
Immunocytochemistry/Immunofluorescence: Glut4 Antibody (3G10A3) [NBP2-22214] - Analysis of HepG2 cells using Glucose Transporter GLUT4 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.



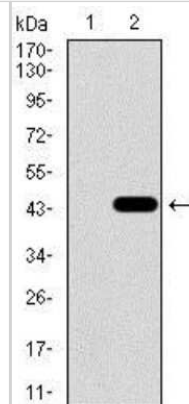
Immunohistochemistry-Paraffin: Glut4 Antibody (3G10A3) [NBP2-22214] - analysis of cardiac muscle tissues using SLC2A4 mouse mAb with DAB staining.



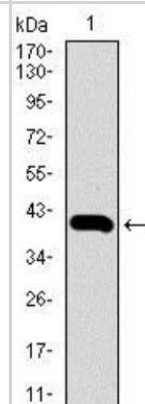
Flow Cytometry: Glut4 Antibody (3G10A3) [NBP2-22214] - Flow cytometric analysis of HeLa cells using Glucose Transporter GLUT4 mouse mAb (green) and negative control (purple).



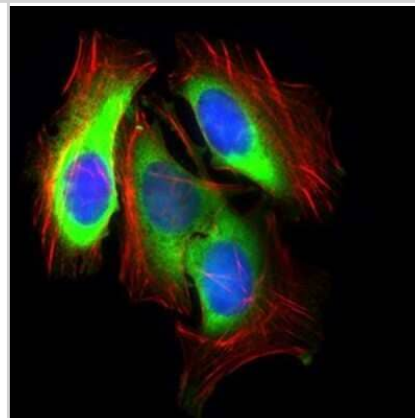
Western Blot: Glut4 Antibody (3G10A3) [NBP2-22214] - Western blot analysis using Glucose Transporter Glut4 Antibody (3G10A3)mAb against HEK293 (1) and Glucose Transporter GLUT4 (AA: 224-353)-hlgGFc transfected HEK293 (2) cell lysate.



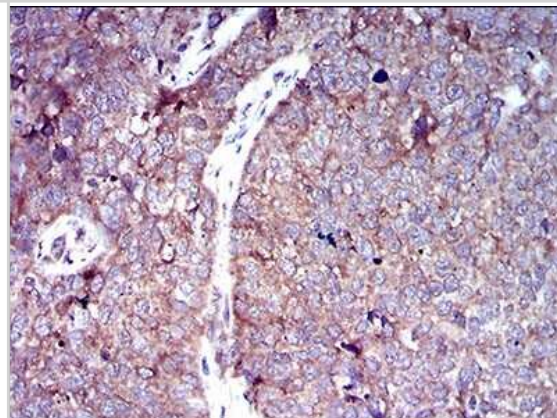
Western Blot: Glut4 Antibody (3G10A3) [NBP2-22214] - human Glucose Transporter GLUT4 recombinant protein.



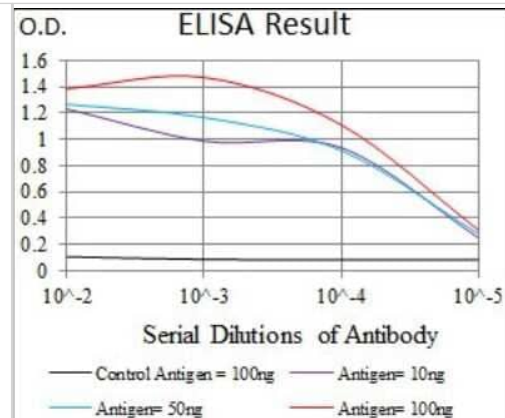
Immunocytochemistry/Immunofluorescence: Glut4 Antibody (3G10A3) [NBP2-22214] - Analysis of HeLa cells using Glucose Transporter GLUT4 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.



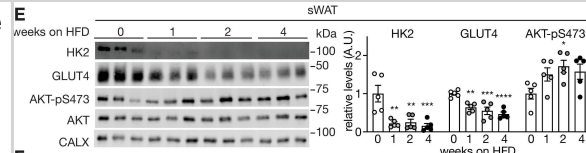
Immunohistochemistry-Paraffin: Glut4 Antibody (3G10A3) [NBP2-22214] - Analysis of paraffin-embedded bladder cancer tissues using Glucose Transporter GLUT4 mouse mAb with DAB staining.



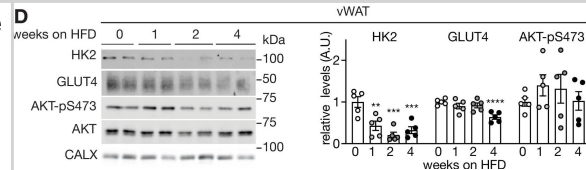
ELISA: Glut4 Antibody (3G10A3) [NBP2-22214] - Red: Control Antigen (100ng); Purple: Antigen (10ng); Green: Antigen (50ng); Blue: Antigen (100ng)



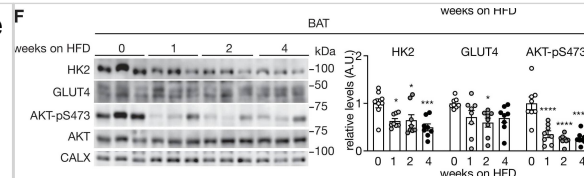
Supporting data 2 for Figure 1.(A-B) Body weight (A) and fasting glucose levels (B) of mice fed a HFD for 0, 1, 2, or 4 weeks. One-way ANOVA compared to 0 week HFD-fed mice, \*\* $p < 0.01$ , \*\*\* $p < 0.001$ , \*\*\*\* $p < 0.0001$ .  $n = 10$  (C) ITT on mice fed a HFD for 0, 1, 2, 4 weeks, and mice fed 2 week HFD and 2 week ND. The mice were fasted for 6 hours and injected with insulin (0.75 U/kg body weight). One-way ANOVA, \* $p < 0.05$ .  $n = 8$  (0 week ND), 10 (1 week HFD), 10 (2 week HFD), 10 (2 week HFD), and 6 (2 week HFD +2 week ND). (D–F) Immunoblots of vWAT(D), sWAT(E), and BAT (F) from mice fed a HFD for 0, 1, 2, or 4 weeks. Mice were fasted for 6 hours and injected with insulin (0.75 U/kg body weight).  $n = 5$ . See Figure 1—figure supplement 2—source data 1. Figure 1—figure supplement 2—source data 1. Uncropped blots and source data for graphs for Figure 1—figure supplement 2. Uncropped blots and source data for graphs for Figure 1—figure supplement 2. Image collected and cropped by CiteAb from the following open publication (<https://pubmed.ncbi.nlm.nih.gov/36920797>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



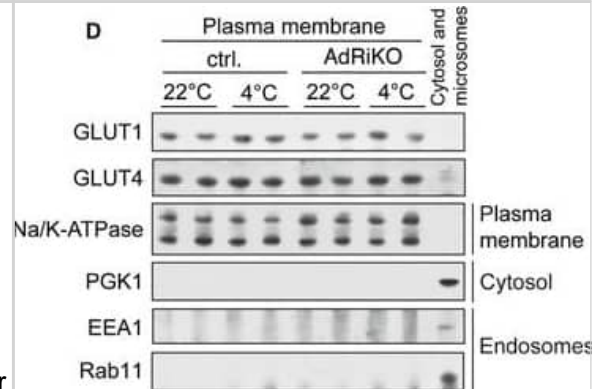
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Supporting data 2 for Figure 1.(A-B) Body weight (A) and fasting glucose levels (B) of mice fed a HFD for 0, 1, 2, or 4 weeks. One-way ANOVA compared to 0 week HFD-fed mice, \*\* $p < 0.01$ , \*\*\* $p < 0.001$ , \*\*\*\* $p < 0.0001$ .  $n = 10$  (C) ITT on mice fed a HFD for 0, 1, 2, 4 weeks, and mice fed 2 week HFD and 2 week ND. The mice were fasted for 6 hours and injected with insulin (0.75 U/kg body weight). One-way ANOVA, \* $p < 0.05$ .  $n = 8$  (0 week ND), 10 (1 week HFD), 10 (2 week HFD), 10 (2 week HFD), and 6 (2 week HFD +2 week ND). (D–F) Immunoblots of vWAT(D), sWAT(E), and BAT (F) from mice fed a HFD for 0, 1, 2, or 4 weeks. Mice were fasted for 6 hours and injected with insulin (0.75 U/kg body weight).  $n = 5$ . See Figure 1—figure supplement 2—source data 1. Figure 1—figure supplement 2—source data 1. Uncropped blots and source data for graphs for Figure 1—figure supplement 2. Uncropped blots and source data for graphs for Figure 1—figure supplement 2. Image collected and cropped by CiteAb from the following open publication (<https://pubmed.ncbi.nlm.nih.gov/36920797>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



mTORC2 in adipose tissue is required for cold-induced glucose uptake and glycolysis. 2-deoxyglucose 6-phosphate (2DG6P) accumulation in BAT of AdRiKO and control mice housed at 22 or at 4C for 4 h ( $n = 6$ /group). Extracellular acidification rate (ECAR) of BAT explants from AdRiKO and control mice housed at 22 or at 4C for 4 h ( $n = 7$ /group). Immunoblot analysis of BAT from AdRiKO and control mice housed at 22 or at 4C for 8 h for the indicated proteins ( $n = 6$ /group, each lane represents a mix of 3 mice). Immunoblot analysis of isolated plasma membranes from BAT of AdRiKO and control mice housed at 22 or at 4C for 8 h for the indicated proteins ( $n = 6$ /group, each lane represents a mix of 3 mice). Immunoblot analysis of mitochondrial and cytosolic fractions from BAT of AdRiKO and control mice housed at 22 or at 4C for 4 h for the indicated proteins ( $n = 6$ /group, each lane represents a mix of 3 mice). Cytosolic hexokinase activity in BAT of AdRiKO and control mice housed at 22 or at 4C for 4 h [ $n = 5$  (control 22C),  $n = 5$  (AdRiKO 22C),  $n = 7$  (control 4C),  $n = 7$  (AdRiKO 4C)]. Mitochondrial hexokinase activity in BAT of AdRiKO and control mice housed at 22 or at 4C for 4 h [ $n = 5$  (control 22C),  $n = 5$  (AdRiKO 22C),  $n = 7$  (control 4C),  $n = 7$  (AdRiKO 4C)]. Data information: Data represent mean  $\pm$  SEM. Statistically significant differences between AdRiKO and control mice were determined with unpaired Student's  $t$ -test and are indicated with asterisks (\* $P < 0.05$ ). Statistically significant differences between temperatures were determined with unpaired Student's  $t$ -test and are indicated with a number sign (# $P < 0.05$ ; ## $P < 0.01$ ; ### $P < 0.001$ ). The exact  $P$ -value for each significant difference can be found in Appendix Table S2. Image collected and cropped by CiteAb from the following open publication (<https://pubmed.ncbi.nlm.nih.gov/26772600>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



## Publications

Albert V, Svensson K, Shimobayashi M et al. mTORC2 sustains thermogenesis via Akt-induced glucose uptake and glycolysis in brown adipose tissue. *EMBO Mol Med.* 2016-01-15 [PMID: 26772600] (WB, Mouse)



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NBP2-33376H	Blue Marker Antibody (6F4-F6) [HRP]
HAF007	Goat anti-Mouse IgG Secondary Antibody [HRP]
NB7539	Goat anti-Mouse IgG (H+L) Secondary Antibody [HRP]
NBP2-27231	Mouse IgG2b Isotype Control (MPC-11)

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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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