## **Product Datasheet**

### O-GIcNAc Antibody (HGAC85) NB300-614

Unit Size: 0.1 ml

Store at -20C. Avoid freeze-thaw cycles.

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#### NB300-614

O-GlcNAc Antibody (HGAC85)

Product Information	
Unit Size	0.1 ml
Concentration	This product is unpurified. The exact concentration of antibody is not quantifiable.
Storage	Store at -20C. Avoid freeze-thaw cycles.
Clonality	Monoclonal
Clone	HGAC85
Preservative	0.1% Sodium Azide
Isotype	IgG3 Kappa
Purity	Unpurified
Buffer	Ascites
Product Description	
Host	Mouse
Species	Human, All Species, Primate
Reactivity Notes	All Species. Human reactivity reported in scientific literature (PMID: 28973823). Chlorocebus sabaeus (Green monkey) reported in PMID 24256719.
Specificity/Sensitivity	Recognizes beta-1,3 linked O-linked N-acetylglucosamine (O-GlcNAc) residues of streptococcal group A carbohydrate as well as O-GlcNAc glycosylated proteins
Immunogen	Heat-killed, pepsin-treated group A streptococci (Streptococcus pyogenes)
Product Application Details	
Applications	Western Blot, Chromatin Immunoprecipitation, ELISA, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Paraffin, Immunoprecipitation, Chromatin Immunoprecipitation (ChIP)
Recommended Dilutions	Western Blot 1:500-1:1000, Chromatin Immunoprecipitation 1:10-1:500. Use reported in scientific literature (PMID 20368426), ELISA 1:100-1:2000, Immunohistochemistry 1:200. Use reported in scientific literature (Zhang , et al), Immunocytochemistry/ Immunofluorescence 1:100 - 1:200. Use reported in scientific literature (Hamiel CR et al), Immunoprecipitation 1:10-1:500. Use reported in scientific literature (Hamiel CR et al), Immunohistochemistry-Paraffin 1:200, Chromatin Immunoprecipitation (ChIP) 1:10-1:500
Application Notes	In Western blot, this antibody detects several proteins representing O-GlcNAc glycoproteins. Immunofluorescence staining of O-GlcNAc in cells results in labeling of the nuclear envelope and pores, nucleolus, and cytoplasm. This staining pattern is consistent with other methods of detecting O-GlcNAc moieties. DO NOT USE WITH DILUENTS CONTAINING GLYCOSYLATED PROTEINS.







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Western Blot: O-GlcNAc Antibody (HGAC85) [NB300-614] - AGO61 modifies GlcNAc residues at specific sites on  $\alpha$ -DG.(a)  $\alpha$ -DG-Fc was transiently transfected with or without AGO61 into COS1 cells. α-DG-Fc recombinant proteins were collected from cell lysates & culture media using protein A resin & analyzed for laminin overlay & Western blot using anti-Fc & anti-O-GlcNAc antibodies. (b) α-DG373-HALO & its mutant T317A/T319A were transiently transfected with or without LARGE-myc into COS7 cells. HALO-fused proteins were collected from medium using HALO resin followed by digestion with TEV protease & then analyzed by laminin overlay. Cell lysates were analyzed for the expression of HALOfused proteins & LARGE-myc by Western blot using anti-HALO & antimyc antibodies. The full-length blots with anti-HALO & anti-myc antibodies are presented in Supplementary Figs. S7f & S7g, respectively. (c) α-DG373-HALO & its mutant T317A/T319A were transiently transfected with or without AOG61 into COS7 cells. HALOfused proteins were collected from the cell lysates using HALO resin followed by digestion with TEV protease & then analyzed by Western blot using an anti-O-GlcNAc antibody (CTD110.6). The cell lysates were analyzed for the expression of HALO-fused proteins & AGO61 by LO Western blot using anti-HALO & anti-AGO61 antibodies. The full-length blots with anti-HALO & anti-AGO61 antibodies are presented in Supplementary Figs. S7h & S7i, respectively. Image collected & cropped in by CiteAb from the following publication (https://www.nature.com/articles/srep03288), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



#### **Publications**

Ishimura E, Nakagawa T, Moriwaki K et al. Augmented O-GlcNAcylation of AMP-activated kinase promotes the proliferation of LoVo cells, a colon cancer cell line. Cancer Sci. 2017-10-03 [PMID: 28973823] (WB, Human)

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Akimoto Y, Kreppel LK, Hirano H, Hart GW. Localization of the O-linked N-acetylglucosamine transferase in rat pancreas. Diabetes. 1999-12-01 [PMID: 10580430] (ICC/IF, Rat)

Turner JR, Tartakoff AM, Greenspan NS. Cytologic assessment of nuclear and cytoplasmic O-linked Nacetylglucosamine distribution by using anti-streptococcal monoclonal antibodies. Proc Natl Acad Sci USA. 1990-08-01 [PMID: 2116002] (ICC/IF, Rat)

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#### Products Related to NB300-614

NBP1-96978	Mouse IgG3 Kappa Light Chain Isotype Control (MG3K)
NB720-B	Rabbit anti-Mouse IgG (H+L) Secondary Antibody [Biotin]
HAF007	Goat anti-Mouse IgG Secondary Antibody [HRP]

#### 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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