

Monoclonal Antibody to O-GlcNAc - Ascites

Alternate names: O-linked N-acetylglucosamine

Catalog No.: SM5136P

Quantity: 0.1 mg

Concentration: 2.0 mg/ml

Background: Many cellular proteins, including nuclear pore, oncogene, cytoskeletal, heat shock, viral and transcription regulatory proteins contain single O-linked N-acetylglucosamine (O-GlcNAc) residues attached to serine or threonine residues. It has been observed that O-GlcNAc glycosylated proteins tend to be under phosphorylated relative to unglycosylated proteins and that O-GlcNAc bearing proteins tend to be found in multimeric complexes. This has led to the suggestion that O-GlcNAc glycosylation may obscure phosphorylation sites and acts as a signaling mechanism or mediator of signaling.

Host / Isotype: Mouse / IgG3

Clone: HGAC85

Immunogen: Heat killed, pepsin treated group A streptococci.

Format: **State:** Liquid diluted Ascites

Buffer System: PBS containing 0.05% Sodium Azide as preservative.

DO NOT USE WITH DILUENTS CONTAINING GLYCOSYLATED PROTEINS.

Applications: **ELISA.**

Immunoprecipitation.

Western Blot: 1 µg/ml, this antibody detects several proteins representing O-GlcNAc glycoproteins.

Immunofluorescence: 10 µg/ml, 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.

Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

Specificity: This antibody recognizes beta-1,3 linked O-linked N-Acetylglucosamine (O-GlcNAc) residues of streptococcal group A carbohydrate as well as O-GlcNAc glycosylated proteins.

Storage: Store the antibody at -20°C.
Avoid repeated freezing and thawing.
Shelf life: one year from despatch.

General Readings: 1. Diabetes Vol. 53, June 2004
2. J. Cell Biol. 104: 1157-1164, 1987.
3. Proc. Natl. Acad. Sci. 57: 5608-5612, 1990.
4. J. Immun., 129(4): 1513-1518, 1982.
5. J. Biol. Chem., 271(49): 31391-31398, 1996.