ABSTRACT

ANTI-GLYCOPROTEIN ANTIBODIES AND USES THEREOF

A new class of antibodies having specificity for glycoproteins are described. The antibodies are shown to bind sensitively and specifically to mannosylated proteins, such as proteins produced by fungi. Assays using these anti-glycoprotein antibodies for monitoring the presence of glycoproteins in a sample are provided. Such methods can be used to monitor methods for production and/or purification of desired polypeptides, which may be used to modify process parameters to modify (*e.g.*, decrease or increase) the amount of glycosylated polypeptide produced and/or present in the purified product. Also provided are methods of using the subject antibodies for detecting the level of expression and secretion of a polypeptide, and methods of using the subject antibodies to purify or deplete a glycoprotein from a sample. In exemplary embodiments, the desired polypeptide may be a multi-subunit protein, such as an antibody, which may be produced in a yeast, such as *Pichia pastoris.*

(no suitable figure)