

A NOVEL ADDITIVE FOR CONTROLLING GLYCOSYLATION OF MONOCLONAL ANTIBODIES

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The glycan structures for a monoclonal antibody (mAb) were significantly modified by the introduction of a cost-effective additive into the production bioreactor. It was found to inhibit the addition of N-acetylglucosamine and fucosylation to N-linked glycans, resulting in high mannose glycan forms. Through cell culture experiments, it was evaluated for effectiveness on three different mAb producing cell lines. The compound can increase high mannose glycans and afucosylation of mAbs produced from different cell lines without any impact to cell culture performance or productivity. It was concluded that the compound has the ability to control glycosylation precisely in a cost effective manner without any loss in titer or manipulation of any other product quality attributes.