

EVALUATION OF RAMAN SPECTROSCOPY FOR ONLINE MONITORING OF CELL CULTURE PRODUCT QUALITY

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Recent years have shown an increase in the development and application of Raman spectroscopy for process monitoring and control in the biopharmaceutical industry. While Raman spectroscopy has been successfully used to predict concentration of cell counts and conventional metabolites, limited work has been presented on its capability to measure product titer and quality. Here, we present results using Raman spectroscopy to obtain online predictions of CHO antibody titer, charge variants, size variants, and glycan species across several products and cell lines. Products assessed include standard antibodies and complex molecular formats.