

Title: Quantitation of Phosphoprotein Biomarkers in Whole Blood as a Measure of Disease State and Therapeutic Response

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Abstract:

Phosphoproteins integral to signal transduction are being evaluated as markers of biochemical coverage in preclinical studies. Stimulation of whole blood with a variety of ligands generates changes in specific phosphoproteins, transcripts and secreted analytes. The application of 7-color FACS protocols to selectively monitor changes in phosphoproteins in particular cell types has also led to the identification of disease-related differences in pathway responses which exist between patient and normal donor whole blood samples. Some of these cell-intrinsic changes in signaling pathway activation correlate with condition-specific differences in analyte secretion.