

Vitamin Analysis Methodology

Water-soluble vitamins in cell culture and fermentation media can be separated, identified, and quantified via HPLC. The separation uses a reversed phase C-18 column with a combination of aqueous buffer and organic solvents using an Agilent 1100 HPLC analyzer. Peak detection uses a combination of UV (diode array) and scanning fluorescence detectors. Peak areas are used for quantification by applying an external standard technique. Following analysis and quantification, an Excel spreadsheet is created; analysis results are reported in the spreadsheet in mg/L per vitamin.