

Publication

Acquisition of enzymatic progress curves in real time by quenching-free ion exchange chromatography

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Author(s) Agustoni, Elia; Teixeira, Raphael Dias; Huber, Markus; Flister, Susanne; Hiller, Sebastian; Schirmer, Tilman

Author(s) at UniBasel [Schirmer, Tilman](#) ; [Agustoni, Elia](#) ; [Dias Teixeira, Raphael](#) ; [Huber, Markus](#) ; [Flister, Susanne](#) ; [Hiller, Sebastian](#) ;

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We describe a quenching-free, 'online' ion exchange chromatography (olEC) method for the quantitative analysis of enzymatic reactions in real-time. We show that separate quenching of the ongoing reaction performed conventionally is not required, since enzymatic reactions are interrupted upon immobilization of the reaction compounds by binding to the stationary phase of the ion exchange column. The reaction mix samples are directly injected into the column, thereby improving data consistency and allowing automation of the process. The method allows reliable and efficient acquisition of enzymatic progress curves by automatic loading of aliquots of an ongoing reaction at predefined timepoints. We demonstrate the applicability of this method for a variety of enzymatic reactions. SUBJECT: Enzymatic assays and analysis.

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