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ACCEPTED MANUSCRIPT

Enterokinase monolithic bioreactor as an efficient tool for biopharmaceuticals preparation: on-line cleavage of fusion proteins and analytical characterization of released products

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Highlights

- 1. Recombinant enterokinase (rEK) was immobilized on chromatographic monolithic supports
- 2. The catalytic activity of immobilized rEK was characterized using a peptide substrate
- 3. In-flow hydrolysis of two fusion proteins was quantitatively carried out in two hours
- 4. rEK bioreactor site-specificity in fusion protein cleavage was investigated by LC-MS
- 5. rEK stability and reusability was significantly increased by immobilization strategy

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