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Surfactants enhance recovery of poorly soluble drugs during microdialysis sampling: implications for in vitro dissolution-/permeation-studies.

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Highlights

- sodium dodecyl sulphate enhances microdialysis-recovery of hydrophic celecoxib
- due to reduced non-specific binding of celecoxib to surfaces
- due to improved extraction efficiency (sink) via micellar drug solubilization

Abstract

Aim of this project was to investigate the applicability of a recently developed in vitro microdialysis-sampling approach in connection with a dissolution-/permeation (D/P) system, especially the impact of surfactants within the perfusion fluid. The D/P-system is based on side-by-side chambers, separated by a barrier that simulates the intestinal barrier. Here, in contrast to conventional D/P-systems, the