

Title (en)

FRONTAL AFFINITY CHROMATOGRAPHY/MALDI TANDEM MASS SPECTROMETRY

Title (de)

FRONTALAFFINITÄTSCHROMATOGRAPHIE/MALDI-TANDEM-MASSENSPEKTROMETRIE

Title (fr)

CHROMATOGRAPHIE D'AFFINITE FRONTALE/SPECTROMETRIE DE MASSE EN TANDEM MALDI

Publication

**EP 1747456 A1 20070131 (EN)**

Application

**EP 05748644 A 20050524**

Priority

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Abstract (en)

[origin: WO2005114170A1] Sol-gel derived monolithic silica columns containing entrapped dihydrofolate reductase were used for frontal affinity chromatography of small molecule mixtures. The output from the column combined with a second stream containing the matrix molecule (HCCA) and was directly deposited onto a conventional MALDI plate that moved relative to the column via a computer controlled x-y stage, creating a semi-permanent record of the FAC run. The use of MALDI MS allowed for a decoupling of the FAC and MS methods allowing significantly higher ionic strength buffers to be used for FAC studies, which allowed for better retention of protein activity over multiple runs.

IPC 8 full level

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