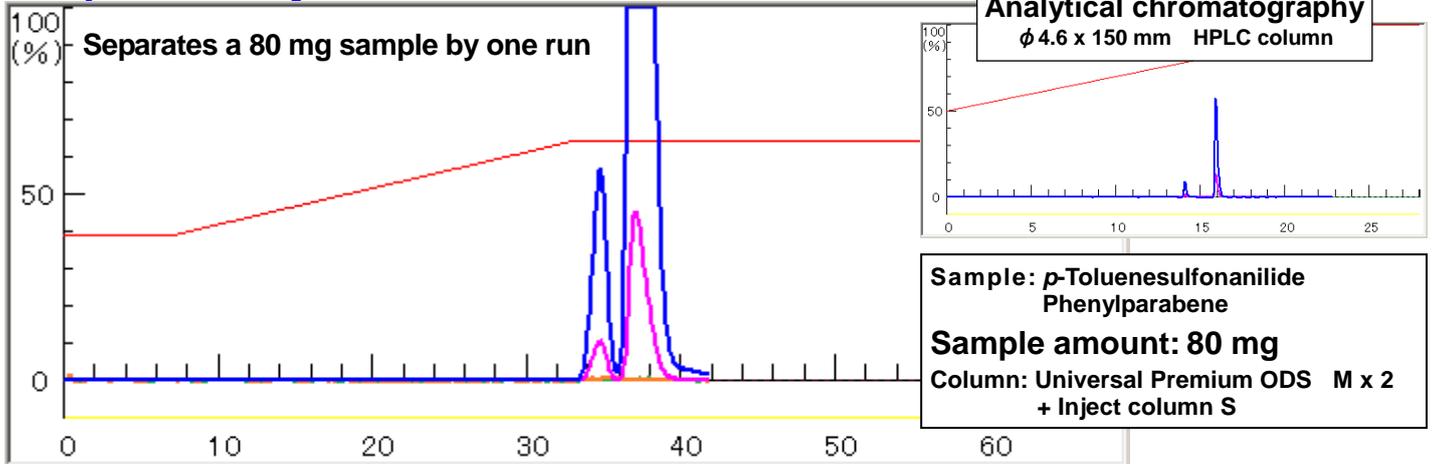


Separation in reverse phase completes with one chromatography

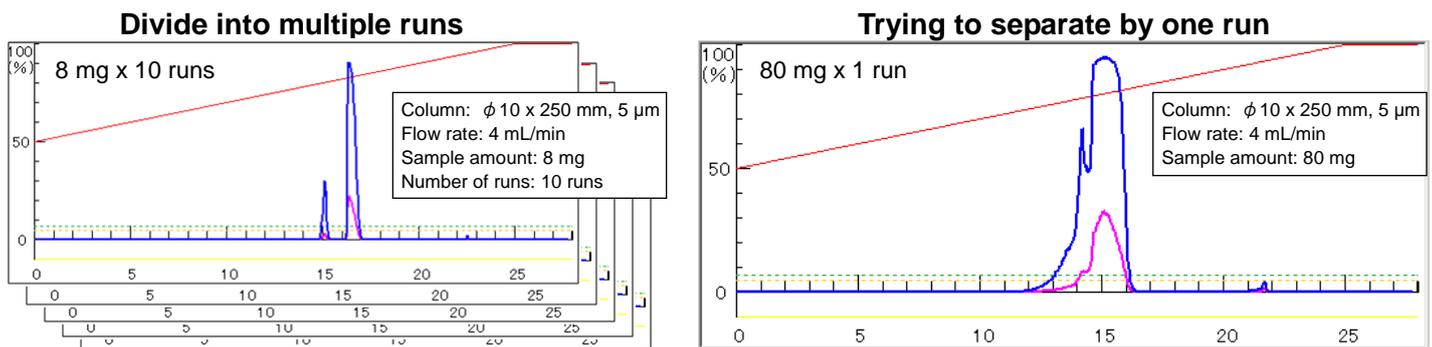
— Separates several tens of mg by one run —

■ Separation by Flash ODS



The target sample amount can be separated by one run.

■ An example of separation by HPLC (semi-preparative column)



In Prep-HPLC, a sample is difficult to dissolve and the volume increases, so it is necessary to divide a separation into multiple runs.

(Dissolves 80 mg with 4 mL of initial solvent)

It is necessary to carry out 10 times (30 minutes of chromatography + 15 minutes of washing + 15 minutes of re-equilibration).

It takes 600 minutes before a desired amount of the sample is separated.

Run again due to a poor separation

In addition, HPLC has many limitations in using it as described below.

- The capacity of the sample loop is limited.
- To avoid contamination of the system, high concentration samples cannot be run.

HPLC has many limitations

When the theoretical plate numbers of medium pressure flash column and HPLC column are compared, in small amounts (analytical scale), HPLC column has the higher theoretical plate number, and it seems it can be scaled up and separated by HPLC as it is.

However, with a sample volume in the preparative scale, the number of theoretical plates in the medium pressure flash column is higher, and the medium pressure separation is more suitable than the HPLC separation in high loading conditions (preparative scale) of mg scale or more.

In addition, when separating a sample by HPLC, it is often necessary to consider factors other than the column, such as the dissolution solvent of the sample, hardware such as piping and injector, and the problem of cross contamination. With medium pressure flash columns, the desired separation can be done in one run without worrying about these problems.