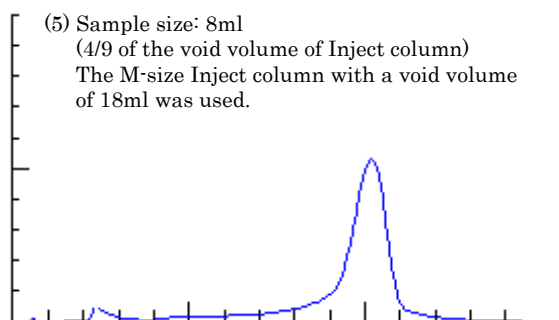
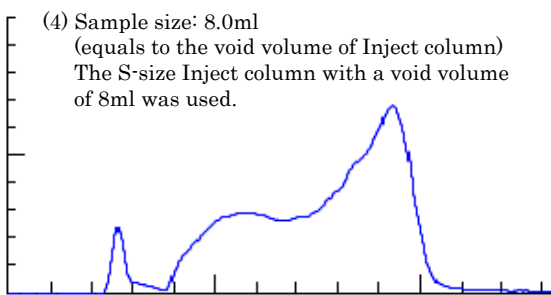
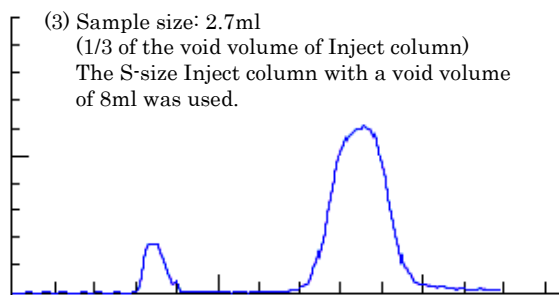
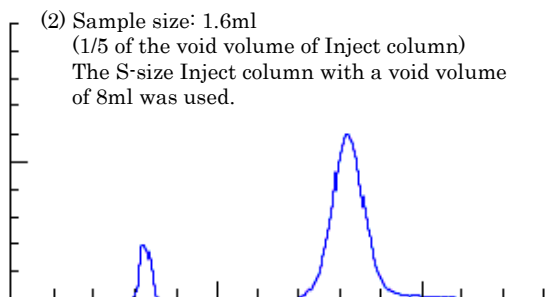
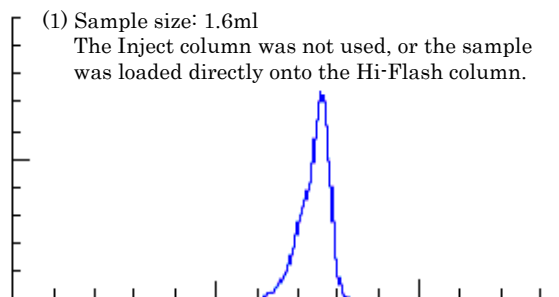


## PREPARATIVE LIQUID CHROMATOGRAPHY OF THE HARDLY SOLUBLE COMPOUND

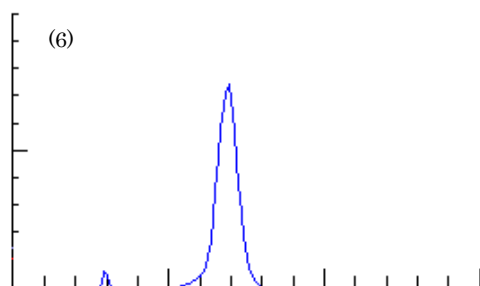
**- Taking an advantage of using an Inject column to load a sample dissolved in high polar solvent -**

When running chromatography to purify and separate a target component from a mixture, it is advisable to use such a solvent to dissolve the sample that is the same as or similar to the mobile phase. However, there are many compounds that can be dissolved only by high polar solvents. We have run a sample dissolved in ethyl acetate using a pair of our Inject column and Hi-Flash column both of which are packed with Silica Gel with hexane/ethyl acetate (80/20 → 60/40) as the mobile phase. The sample was dissolved in ethyl acetate at 5mg/mL. We loaded the sample on the Inject column. We used the L size Hi-Flash chromatographic column, which is of a disposable type. The performance varies depending on the sample size. Please see below the data.



By using an Inject column along with a main chromatographic column, we can reduce the effects of the high polar solvent used for dissolving the sample.

See fig.5.  
A larger Inject column help improve resolution.



See fig.6.  
The sample was dissolved in chloroform at 5mg/ml.  
Sample size: 8ml (4/9 of the void volume of Inject column)  
The M-size Inject column with a void volume of 18ml was used.  
We had a sharp peak of the target compound.