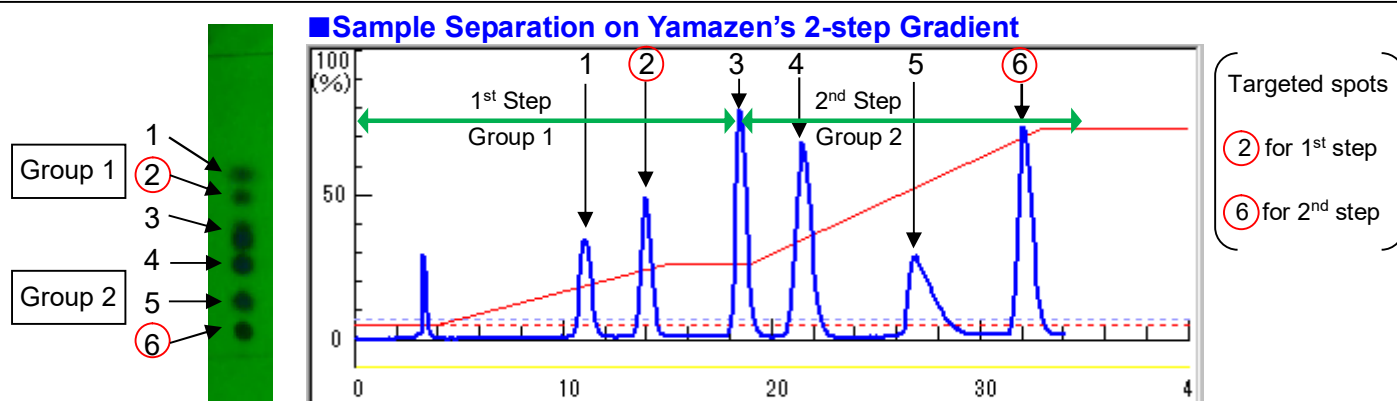


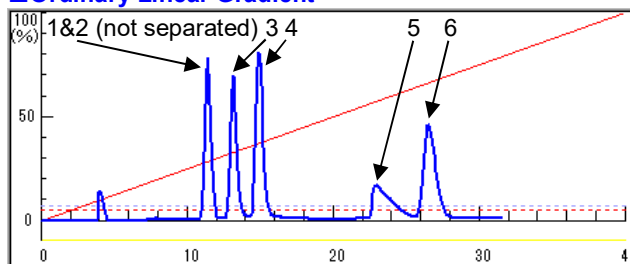
Sample Separation on Yamazen's 2-step Gradient and the Prediction of Separation

- All sample spots will be eluted where predicted. -

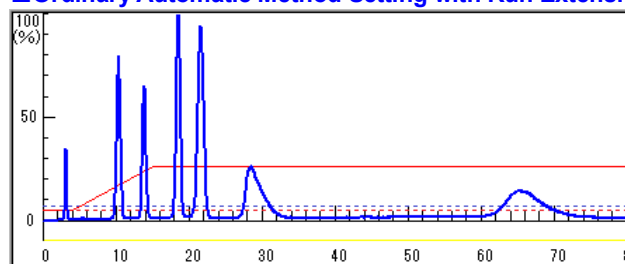
2-step gradient is an advancement from the standard Yamazen Rf gradient (or EPC gradient) which predicts the elution position of a sample upon setting the method. 2-step gradient separates target group 1 on 1st step of the gradient and then target group 2 whose sample spots are seen on the lower section of the TLC on the 2nd step. Step 1 gradient and step 2 gradient are designed to work well with group 1 components and group 2 components respectively. All 6 components are well separated on 2-step gradient. 2-step gradient is capable of controlling the elution position of each component. Thus, even better separations can be achieved by manipulating and modifying the gradient as necessary. In contrast, an ordinary linear gradient cannot predict the elution position of the sample, which often results into poor separation and/or a lengthy run using a lot of solvent.



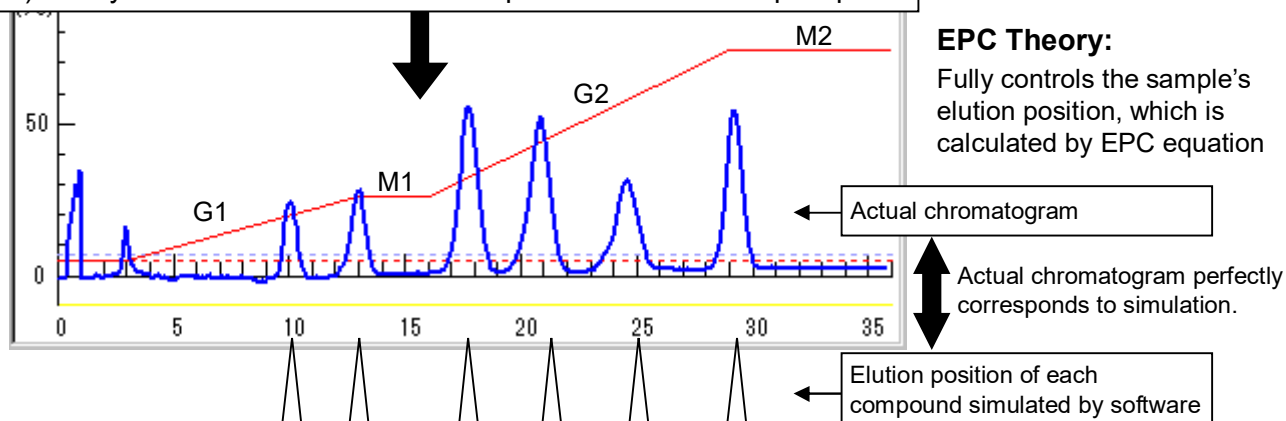
Ordinary Linear Gradient



Ordinary Automatic Method Setting with Run Extension



Yamazen's proprietary gradient is designed based on EPC (Elution Position Control) theory and can simulate the elution position of each sample spot.



Elution position simulated by calculation based on the TLC information corresponds with that of the actual sample run. Due to the capability of elution position control, even better separation can be achieved by the user manipulating and modifying gradient before run or by changing the target spots. The target spots will be separated even better by modifying the gradient or by selecting and inputting different spots as the targets.