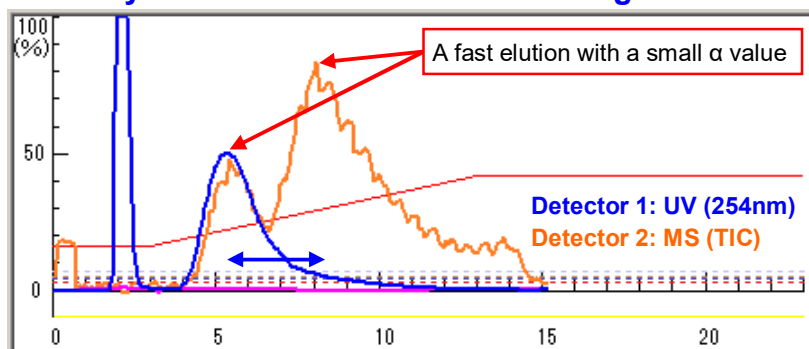


## Selectivity Optimization Mode

# Now, A Solvent System of Ethyl Acetate/Methanol Can Be Used when Separating A Sample by Automatic Method Setting by $\alpha$ -mode.

So far, only chloroform (or DCM)/methanol could be used for  $\alpha$ -mode. Now, ethyl acetate/methanol can be used as well.  $\alpha$ -mode drastically improves the separation of those highly polar compounds which are difficult to separate by conventional methods.

### ■ Separation by usual automatic method setting with the use of ethyl acetate/methanol



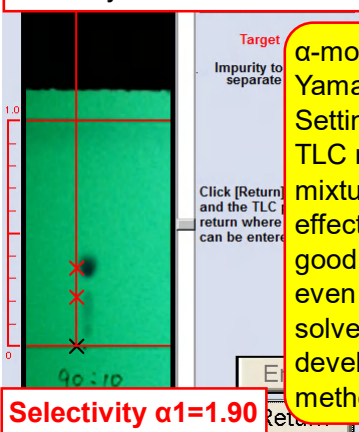
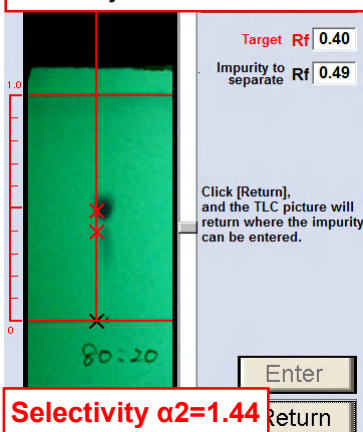
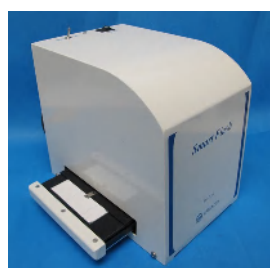
Sample: Caffeine +  
Verapamil hydrochloride  
(Sample amount: 30mg  
including two components)

Inject Column S-size +  
Premium Universal column 16g M-size

TLC image

TLC1: Ethyl acetate/Methanol=80/20

TLC2: Ethyl acetate/Methanol=90/10



$\alpha$ -mode is a further advancement on Yamazen's Automatic Method Setting. It compares the results of TLC run twice with different solvent mixture ratio and determines the effective range of gradient where a good sample separation is achieved even if selectivity factor  $\alpha$  changes as solvent strength changes and develops the optimized gradient method automatically.

## Automatic Method Setting by $\alpha$ -mode

