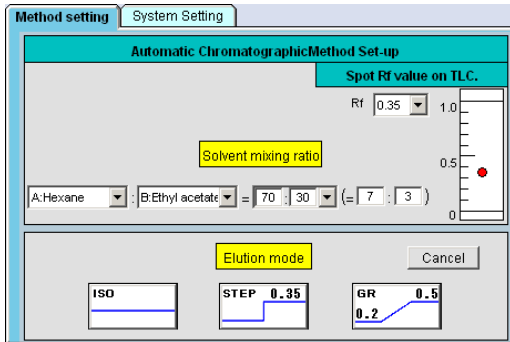


-Yamazen's Automated Flash Systems Predict the Eluting Position of the Target Compound.-

(Integral calculus on Rf value PAT.No.4087395)

- Input TLC results in method setup dialogue boxes.



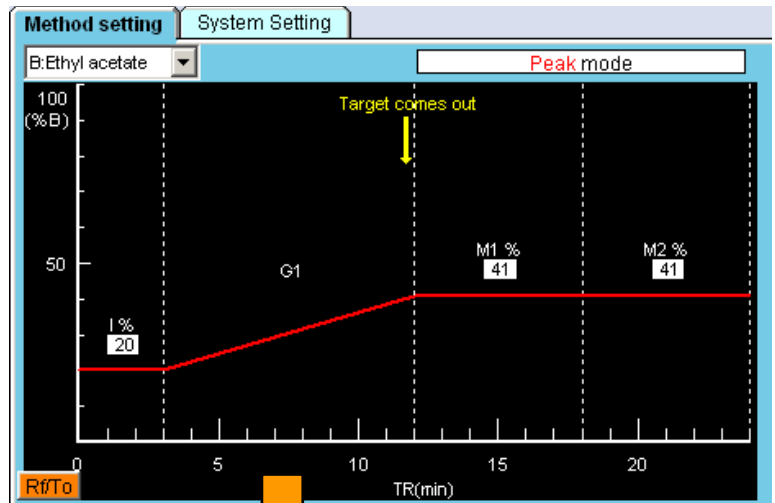
Yamazen's Patented Equation for Predictable Eluting Position of Target Compound

$$\int_0^x R_f(X) dX = 1$$

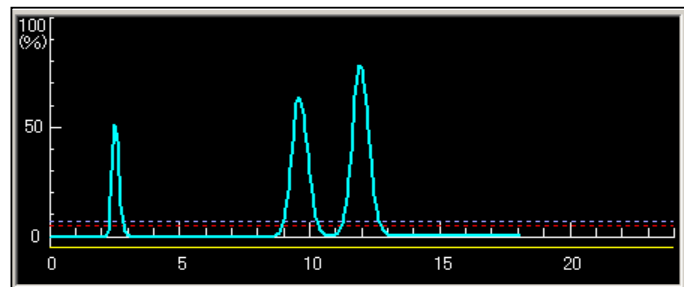
Yamazen's proprietary auto method setup is designed to elute the target compound at "x" column volume.

- ⊙ The target compound will come out at around 4-column volume.
- ⊙ The predictable eluting position of the target compound always stays the same regardless of the column size and the flow rate.
- ⊙ The system to predict the eluting position of the target compound will minimize the run time, save energy and solvent. And it's **eco-friendly**.

- The optimum method is set automatically. And the eluting position of the target compound will be indicated on the gradient graphic.

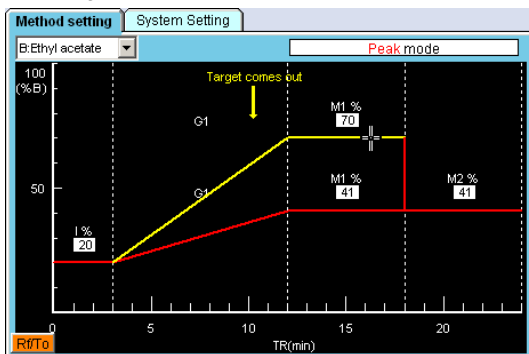


- The target compound will come out where predicted.

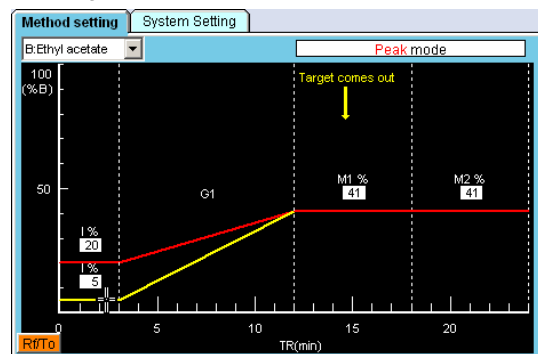


- If the gradient is modified, the yellow arrow predicting the eluting position of the target compound will shift accordingly.

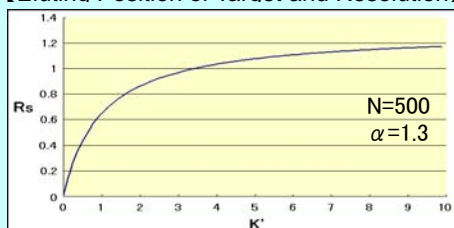
(% at M1 has been increased from 40% to 70%, and the target compound will come out sooner.)



(% at I has been decreased from 20% to 5%, and the target compound will be eluted later.)



【Eluting Position of Target and Resolution】



The position at 4-column volume is as same as $K' = 3$ and/or $R_f = 0.25$.

$$R_s = \frac{\sqrt{N}(\alpha - 1)}{4} \frac{k'}{\alpha k' + 1}$$

