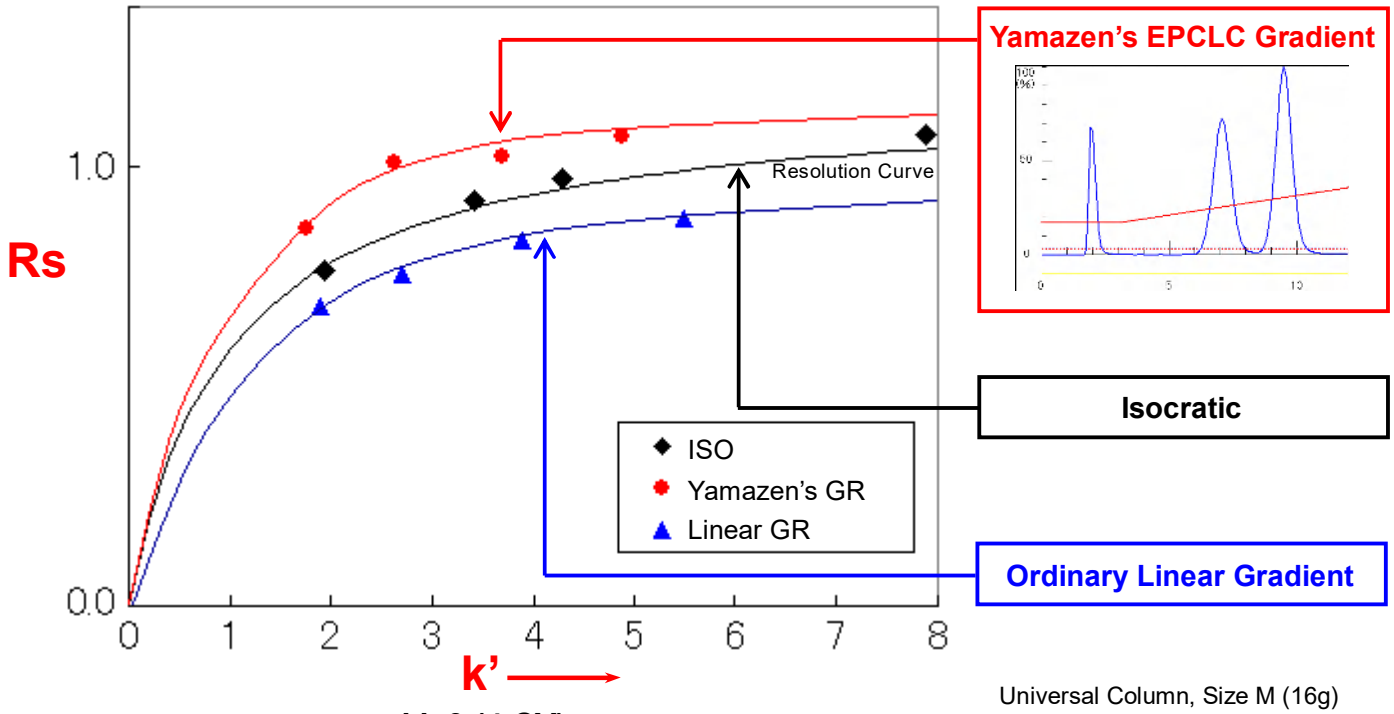
EPCLC 'Smart Flash' Automated Flash Chromatography System

EPCLC Achieves The Highest Resolution In Sample Purification.

Capacity Factor k' and Resolution Rs



k'=3 (4 CV)

Universal Column, Size M (16g)
Sample: Butyl-p-hydroxybenzoate
Methyl-p-hydroxybenzoate
(5mg each in 1ml)

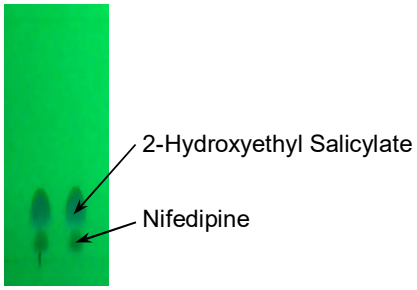
Resolution is defined by the following formula.

$$Rs = \frac{\sqrt{N}}{4} \cdot \frac{\alpha - 1}{\alpha} \cdot \frac{k'}{1 + k'}$$

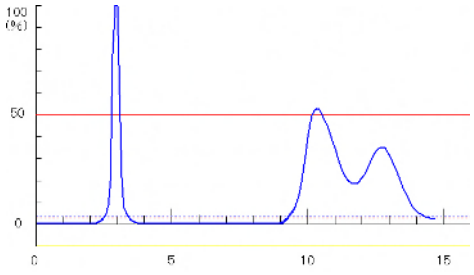
N : Theoretical Plate Number of the Column
α Separation Factor: decided by the column packing material.
k' : Capacity Factor k' = $V/V_0 - 1$ (V: Amount of elution solvent (ml), V_0: Void volume of a column)

Yamazen's EPCLC Gradient method works well for the easy-to-tail samples.

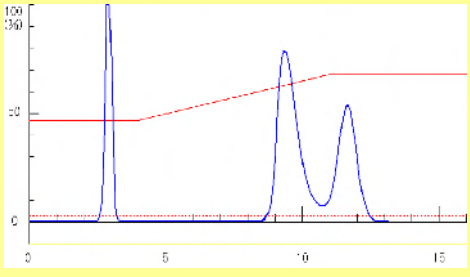
TLC
Hexane: Ethyl acetate = 7:3



ISOCRATIC Method



Yamazen's EPCLC Gradient Method



Sample: 0.2ml of the mixture of 2-Hydroxyethyl salicylate (6 mg/ml) and Nifedipin (80mg/ml)
Column: Yamazen Universal Column, 60Å/25-40um Silica Gel, L-size (40g)

YAMAZEN CORPORATION

HEAD OFFICE : RECRUIT SHINOSAKA BLDG. 3F, 5-14-22 NISHINAKAJIMA, YODOGAWA-KU, OSAKA 532-0011, JAPAN
TEL: +81-6-6304-5839 FAX: +81-6-6304-3681
R & D : SANWA BLDG. 101, 4-6-10 NISHINAKAJIMA, YODOGAWA-KU, OSAKA 532-0011, JAPAN
TEL: +81-6-6304-7284 FAX: +81-6-6304-7283
E-MAIL : info@yamazenc.co.jp WEB SITE : http://www.yamazenc.co.jp