

For setting separation conditions

Resolution improvement on ODS column with unique separation characteristics

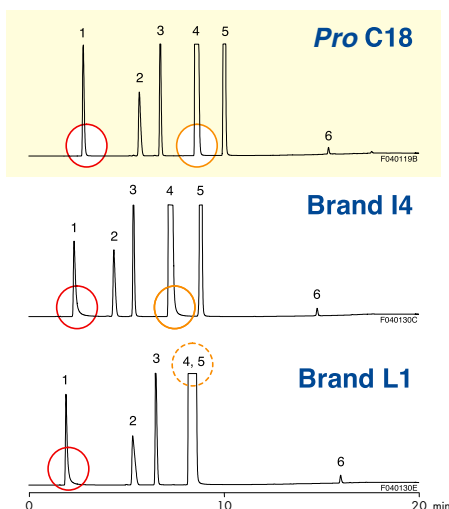
S050714A

During the optimization of separation conditions, changing the composition of the mobile phase is an effective way to influence retention and resolution of compounds. Proper column selection can also change retention and selectivity. YMC offers a variety of ODS column types, each with its own ability to influence the quality and reproducibility of separations. Changing ODS column types is an easy way to optimize resolution and selectivity, particularly when retention is adequate.

YMC-Pack Pro C18

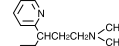
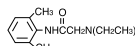
Conventional ODS

Excellent peak shapes

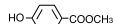


A commercial nasal spray

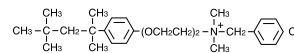
1. Maleic acid 2. Lidocaine 3. Naphazoline 4. Chlorpheniramine



5. Methyl p-hydroxybenzoate



6. Benzethonium chloride



Column : 150 X 4.6 mm I.D.
Eluent : A) 20mM KH₂PO₄-H₃PO₄ (pH 2.5)
 B) methanol
 20-90%B (0-15 min), 90%B (15-20 min)
Flow rate : 1.0 mL/min
Temperature : 37°C
Detection : UV at 260 nm

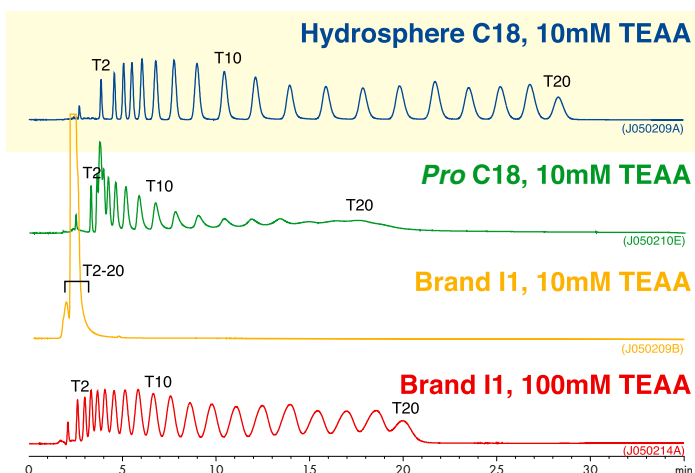
Pro C18 produces superior peak shapes for acidic, basic, and neutral compounds and has excellent selectivity.

Hydrosphere C18

Low carbon ODS

Superior ODS for separating hydrophilic compounds.

Can be used with 100% water mobile phase.



Oligonucleotides d(pT)₂₋₂₀

Column : 150 X 4.6 mm I.D.
Eluent : A) 10mM or 100mM TEAA (pH 6.0)
 B) 10mM or 100mM TEAA (pH 6.0) / acetonitrile (80/20)
 55-61%B (0-30 min)
Flow rate : 1.0 mL/min
Temperature : 35°C
Detection : UV at 269 nm

Hydrosphere C18 enables good separation of oligonucleotides under low triethylamine content mobile phase conditions.

YMC-Pack Pro C18 RS

High carbon ODS

High carbon ODS with excellent shape recognition ability for separating geometric isomers.

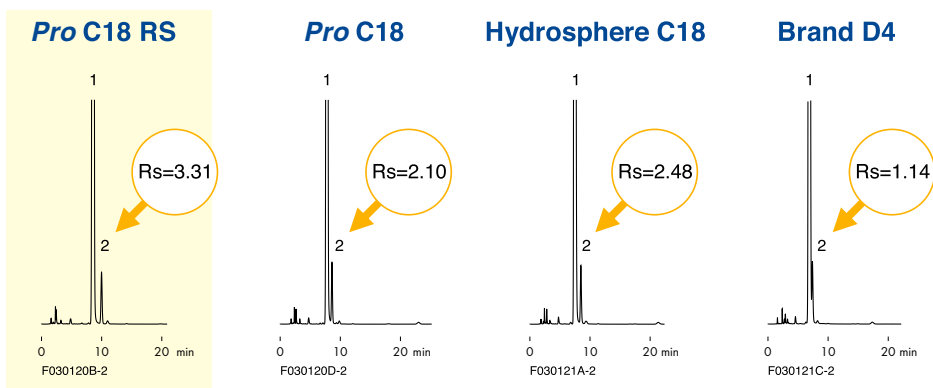
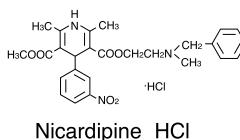


Photo-irradiated nicardipine hydrochloride



1. Nicardipine
2. Photoproduct

Column : 150 X 4.6 mm I.D.
Eluent : 20mM KH₂PO₄-K₂HPO₄ (pH 6.9) / methanol (25/75)
Flow rate : 1.0 mL/min
Temperature : 37°C
Detection : UV at 254 nm

Pro C18 RS has superior ability to separate hydrophobic pharmaceutical compounds.