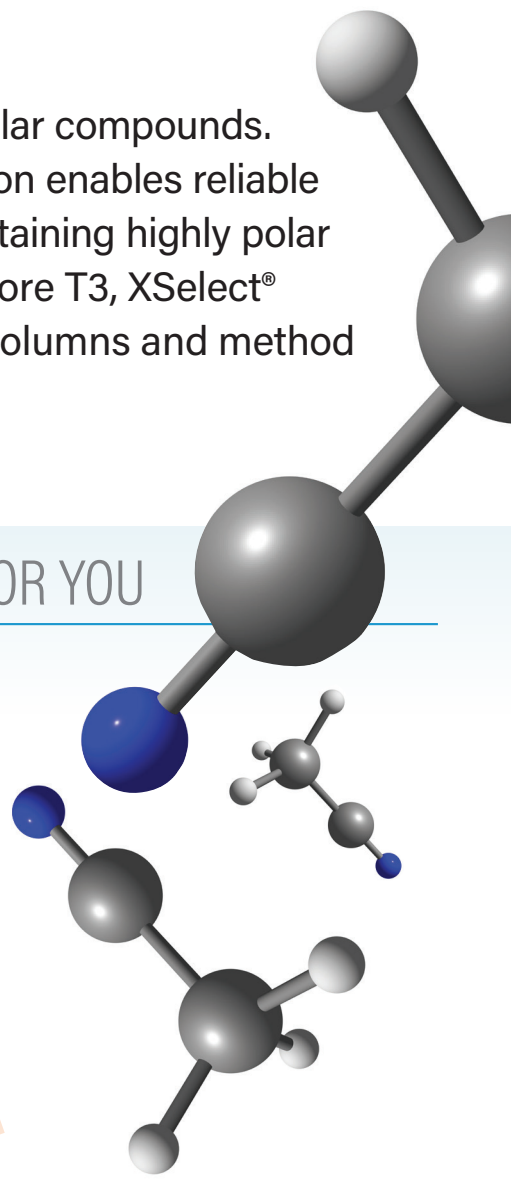
Retaining Polar Compounds

T3 columns are ideal for polar compound retention

What is a T3 column?

T3 reversed-phase columns are designed for separating polar compounds. An optimized particle pore size and C_{18} surface concentration enables reliable operation with 100% aqueous mobile phases needed for retaining highly polar analytes. Waters® offers a full range of CORTECS® Solid-Core T3, XSelect® HSS T3/ACQUITY UPLC® HSS T3, and Atlantis® Silica T3 columns and method validation kit options based on your separations needs.

www.waters.com/T3

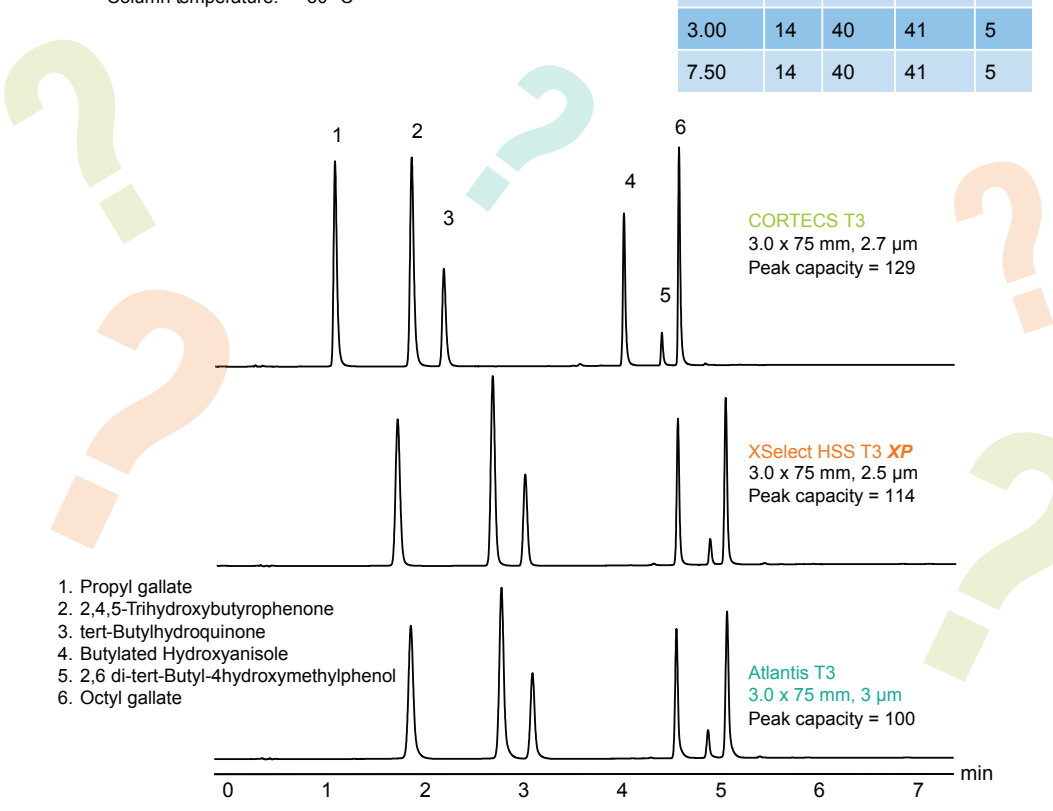


HOW TO IDENTIFY WHICH T3 COLUMN IS RIGHT FOR YOU

System:	ACQUITY® Arc™ with 2998 PDA
Mobile phase A:	Water
Mobile phase B:	Acetonitrile
Mobile phase C:	Methanol
Mobile phase D:	2% Formic acid in water
Flow rate:	0.85 mL/min
Injection volume:	2.1 µL
Column temperature:	30 °C

Gradient:

Time (min)	% A	% B	% C	% D
0.00	60	17.5	17.5	5
2.00	40	27.5	27.5	5
3.00	14	40	41	5
7.50	14	40	41	5



1. Propyl gallate
2. 2,4,5-Trihydroxybutyrophenone
3. tert-Butylhydroquinone
4. Butylated Hydroxyanisole
5. 2,6 di-tert-Butyl-4hydroxymethylphenol
6. Octyl gallate

DID YOU KNOW?

Fully-porous packing materials such as Atlantis T3 and HSS T3, exhibit higher retention, while the solid-core packing materials used in CORTECS T3 is designed for maximum efficiency and peak capacity.

Are faster run times and improved resolutions most important?

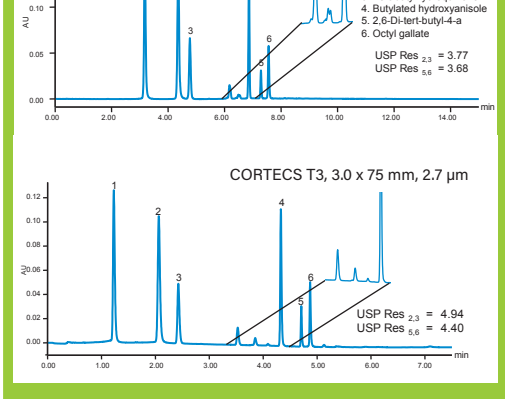
CORTECS® COLUMNS

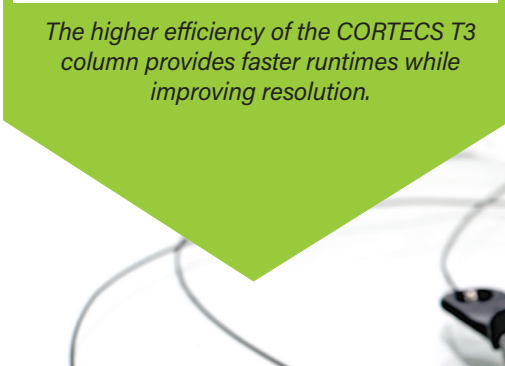
Balanced retention for polar analytes

faster analysis = more info in less time

30% lower backpressure

39% more efficient





The higher efficiency of the CORTECS T3 column provides faster runtimes while improving resolution.

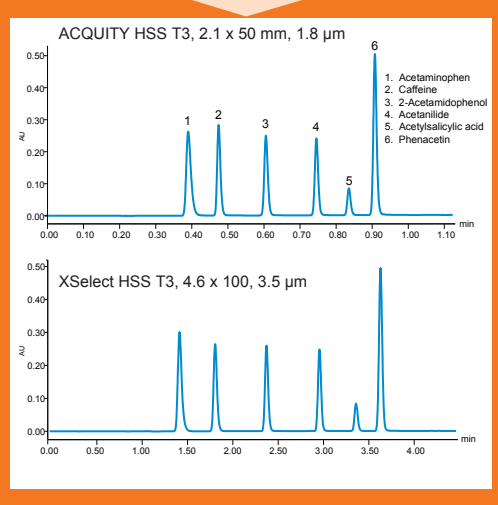
Is the ability to easily transfer methods to other platforms most important?

Acquity UPLC® XSELECT® Columns

Universal polar compound retention

easily transfer methods

stable at high pressure



Because ACQUITY HSS T3 and XSelect HSS T3 differ only in particle size, transfer between columns and instrument platforms is straightforward.

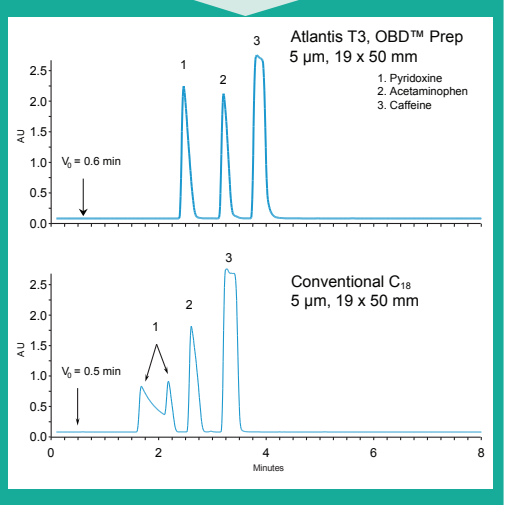
Is isolating and purifying polar compounds most important?

Atlantis® Columns

High mass loading and retention

2X more retention

great peaks even at low pH



Atlantis T3 preparative columns outperform conventional C_{18} columns for polar compound loading.