

APPLICATION NEWS

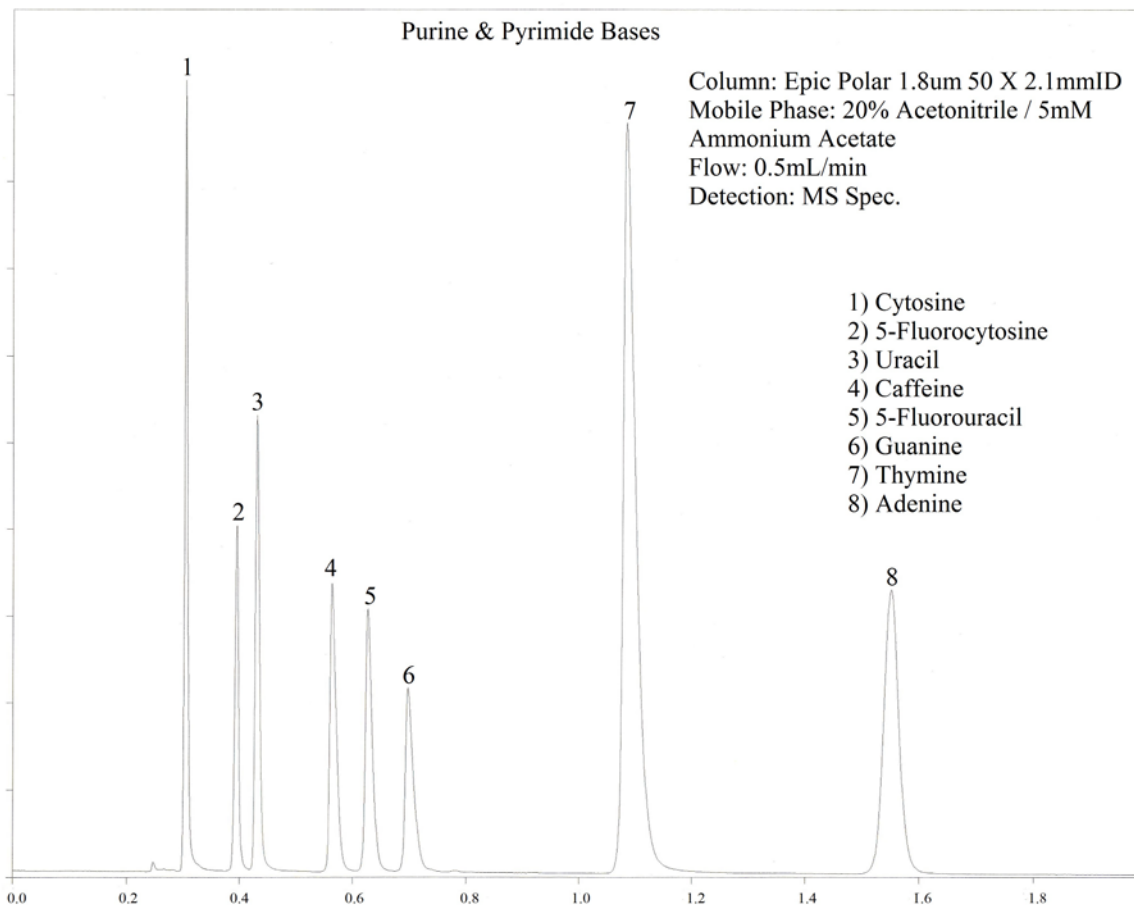
Pervident-RP(I) LC/MS Column Kit

ES Industries is pleased to introduce the Pervident-RP(I) LC/MS column kit incorporating advanced selective stationary phases using 1.8 μ m particles for high performance/high resolution LC/MS separations. The Pervident-RP(I) LC/MS kit provides the flexibility to examine and survey advanced separation solutions for the most challenging chromatographic applications. The kit is designed to give the LC/MS method development scientist column chemistries that go beyond ODS hydrophobic interactions. The enhanced stationary phase selectivity of the kit can be used on difficult to separate chemicals such as isomers and diastereomers, as well as providing flexibility in mobile phase selection to optimize analysis time and/or detection sensitivity. The kit contains columns specifically optimized (2.1mmID x 50mm length) for LC-MS analysis exhibiting high efficiencies and excellent reproducibility, two characteristics essential for high performance LC-MS solutions. The Pervident-RP(I) kit includes the following column chemistries:

Epic PFP-LB 1.8 μ m – Epic PFP-LB 1.8 μ m is a pentafluorophenyl phase developed at ES Industries to meet the demands of high performance LC/MS separations. ES Industries is the leader in development and commercialization of fluorinated stationary phases for HPLC. Fluorinated phases are able to perform many unique and difficult separations which could not be performed on the best available C18 columns. Fluorinated phases have traditionally suffered from poor column lifetimes, unstable baselines and column bleed especially when used with mass spectrometry (MS). At ES Industries we have developed a low bleed (LB) series of fluorinated phases one of which is Epic PFP-LB. Epic PFP-LB columns have been stabilized to provide low column bleed, increased lifetimes, better pH stability (pH range 1 –10) and superior LC-MS performance. The Epic PFP-LB is a pentafluorophenyl that has been baseline stabilized and is ready for high performance separations for a number of applications including the separation of natural products, halogenated compounds, aromatics, conjugated compounds, peptides and trace impurities in complex matrices. Many of these high performance separations were not possible with existing PFP columns especially in the area of trace impurities where baseline bleed levels were unacceptable.

Epic Phenyl-SD 1.8 μ m – Epic Phenyl-SD 1.8 μ m is a super dense phenyl bonded phase for ultra-high performance LC/MS applications. Using advanced bonding technology developed at ES Industries we have achieved the highest bonding density of any phenyl phase available. This finally fulfills the unrealized separation potential of the phenyl phase for reversed phase chromatography. The super bonding density of Epic Phenyl-SD has elevated phenyl stationary phase interaction to the next level of selective separation performance. Epic Phenyl-SD is a truly unique stationary phase with properties significantly different than ODS phases. This unique character results from the super dense bonding of phenyl groups imparting superior electron interaction for enhanced retention for many compounds particularly those containing aromatic rings. Unfortunately, many LC/MS separations performed on ODS columns are forced to utilize mobile phases and operating conditions that produce for inferior mass spectrometry performance. A challenge easily handled by the unique stationary phase interaction of Epic Phenyl-SD, this phase excels in areas such as ability to utilize of optimal mobile phase compositions and operating conditions that are sufficiently more compatible with mass spectrometry.

Epic Polar 1.8um - Epic Polar 1.8um is a highly dense ether linked C18 packing specifically engineered for the retention of polar analytes. Epic Polar enables highly polar solutes to fully interact with the bonded ether linked phase. Epic polar is a true base deactivated reverse phase column and does not contain any undesirable ion exchange or mixed mode characteristics. Epic Polar 1.8um can retain highly water-soluble compounds such as small organic acids, water-soluble vitamins, purines and pyrimidines, catecholamines and other polar compounds. Many of these compounds have been traditionally chromatographed using ion-paired reagents such as the separation example of shown here performed without ion-pairing.



Catalog # K600101 Pervident-RP(I) LC/MS Column Kit

Contains one (1) each of the following:

Epic PFP-LB 1.8u 5cm X 2.1mm

Epic Phenyl-SD 1.8u 5cm X 2.1mm

Epic Polar 1.8u 5cm X 2.1mm