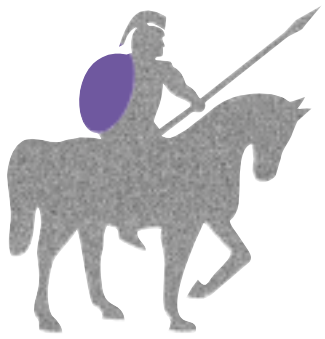
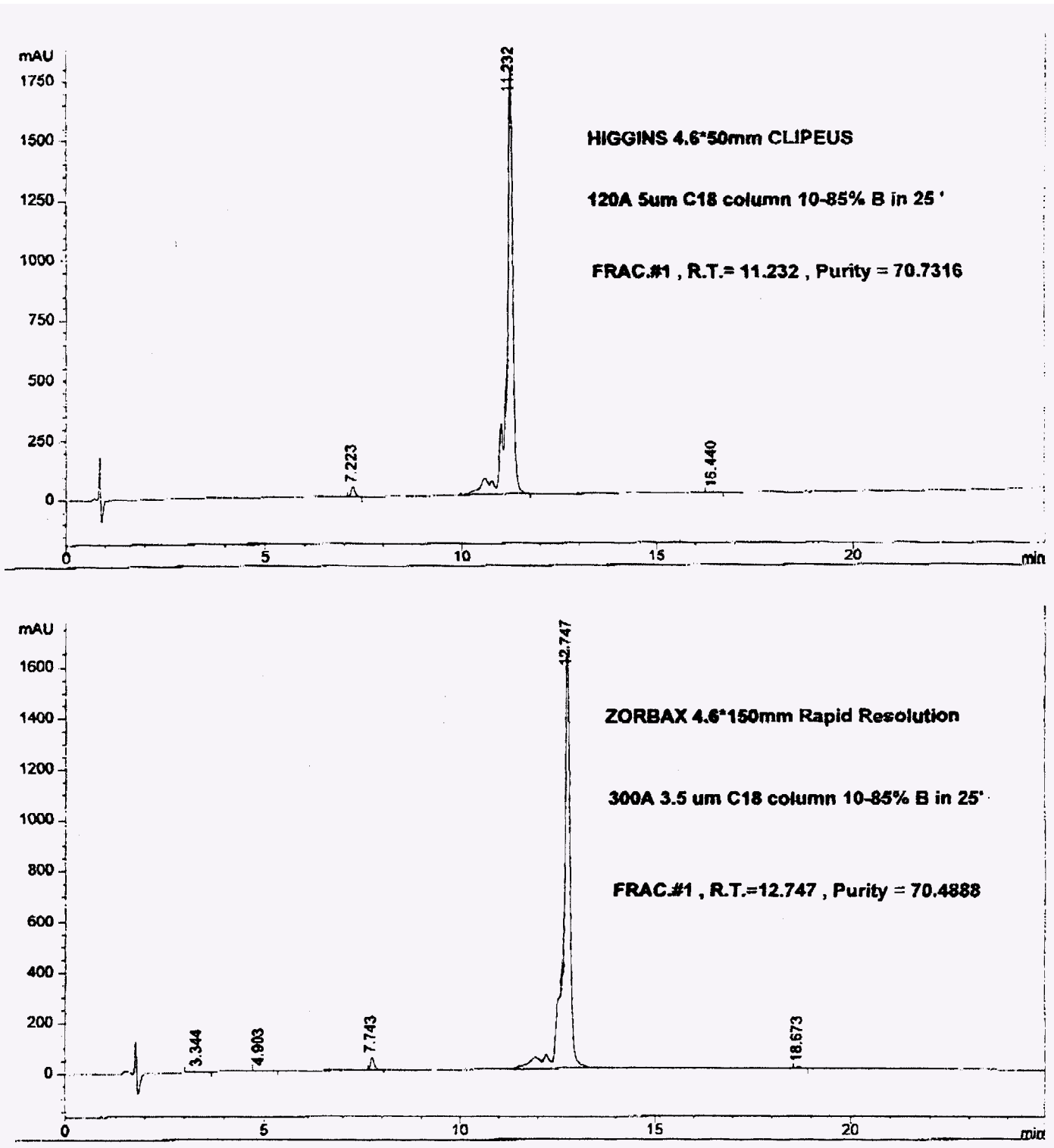
High Speed Analysis of Crude Synthetic Peptides



CLIPEUS C18

- ✓ *Shorter Column*
- ✓ *Higher Resolution*
- ✓ *Faster Separation*
- ✓ *Larger Particle Size*
- ✓ *Lower Pressure*
- ✓ *Faster Equilibration*
- ✓ *Lower Cost*



CLIPEUS selectivity wins another horsepower race:

Particle size, pore size, column length, or selectivity - which is the most important parameter to consider when optimizing a chromatographic separation?

Unfortunately, the sequence listed above is what many analysts follow when developing new, or optimizing old, HPLC methods. Realizing that selectivity is the most powerful factor, an experienced chromatographer approaches the challenge by considering these four factors in the reverse order.

Preparative chromatography fractions of a crude synthetic peptide were analyzed on a Zorbax 150x4.6mm 3.5µm 300Å Rapid Resolution C18 column and a CLIPEUS 50x4.6mm 5µm 120Å C18 column. The results in the chromatograms remind us that column length plays a minor role in gradient separations and illustrates that the selectivity and increased surface area of the CLIPEUS column out-performs a column three times longer and packed with particles 2/3 the diameter. Lower cost, lower operating pressure, and lower risk of clogging are additional advantages the shorter, larger particle size CLIPEUS column offers.

In addition to the C18 phase used in this example, the CLIPEUS columns family includes C8, Cyano, and Phenyl phases. These columns and the derivation of the CLIPEUS name are described in our ***Product Catalog*** available from your local distributor.

Higgins Analytical is grateful to Amos Heckendorf of The Nest Group for permission to share these data.