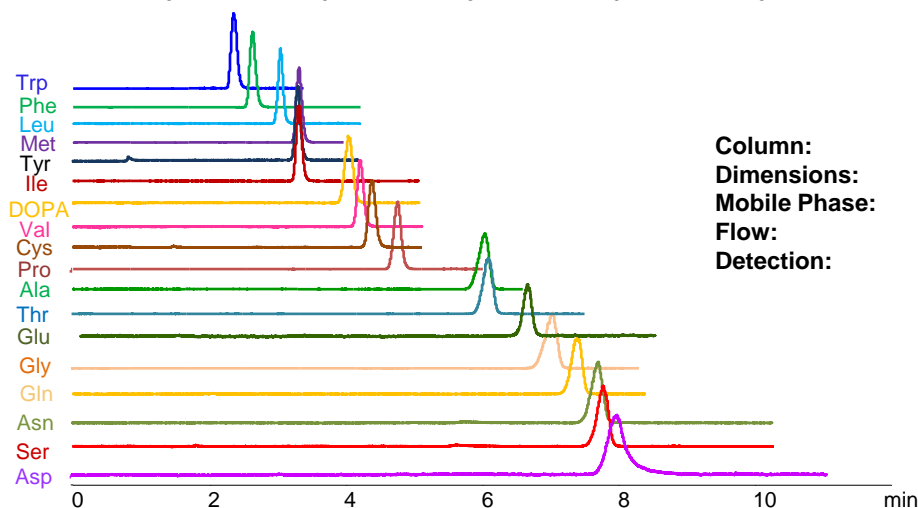
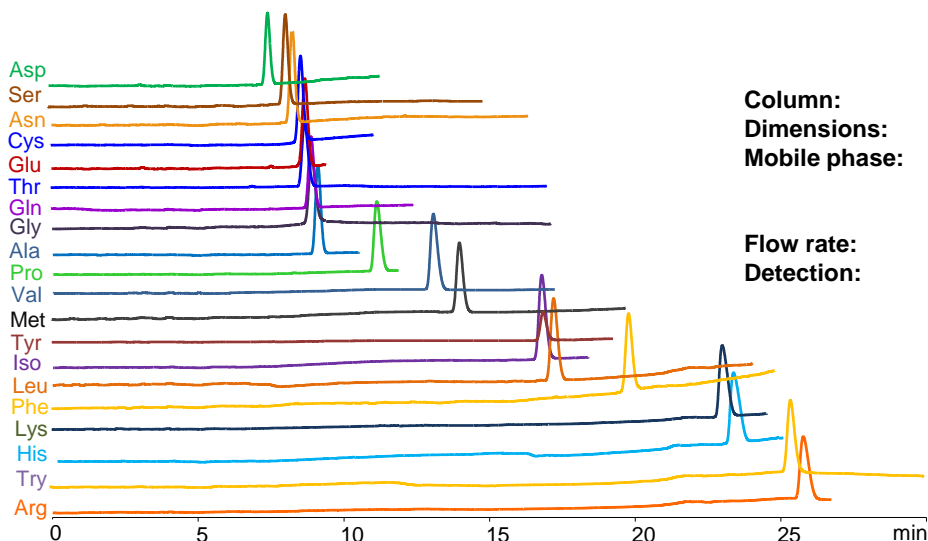


HPLC Analysis of Underivatized Amino Acids in HILIC/SCX and RP/SCX Modes



Application Notes

Amino acids are important building blocks that are used in creating drugs, various chemicals, and peptides. They are also used as supplements and additives to various formulations. All amino acids are zwitterionic and polar in nature. We have developed several methods for the analysis of underivatized amino acids without the use of an ion-pairing reagent. Amino acids are analyzed in HILIC/cation-exchange mode on the Amaze HD column and in RE/cation-exchange mode on the Amaze SC column. The mobile phase consists of ACN with the addition of ions in the form of organic or inorganic acids or salt buffers. Amino acids can be monitored by UV, ELSD, CAD or mass-spec. Retention time is controlled by the amount of ACN (RP and HILIC mechanisms), amount of buffer (HILIC and cation-exchange), and buffer pH (HILIC and cation-exchange). Some effect of the amount of ACN on cation-exchange mechanisms is present and can be used for final tuning of cation-exchange mechanisms. If you want to know what we know, just visit our website at www.helixchrom.com and become an expert in mixed-mode chromatography.