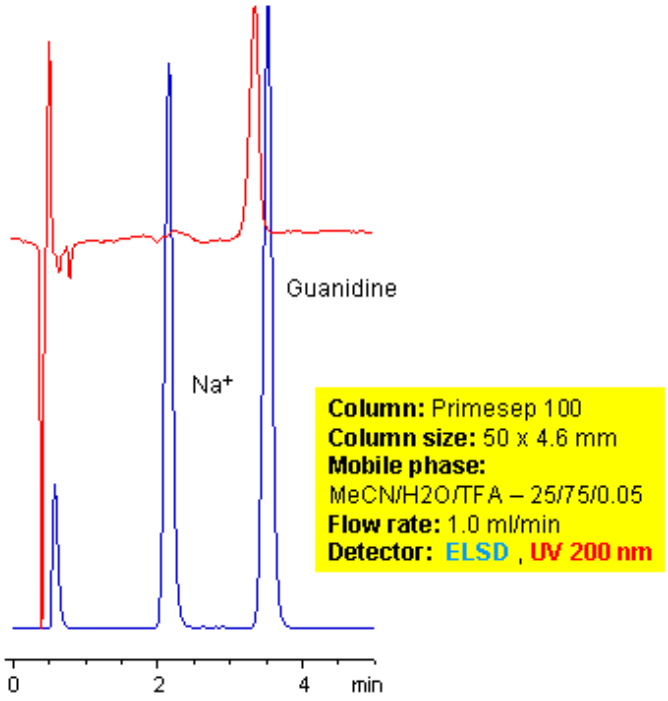
HPLC Application for Retention of Guanidine by Mixed-Mode Chromatography



Guanidine is highly basic (pKa 12.5), and a polar compound is formed by the oxidation of guanine. In the human body, guanine is a byproduct of protein metabolism and can be found in urine. Guanine can be retained by the cation-exchange mechanism on Primesep 100 column. Guanine is slightly UV active and can be observed at 200 nm. A better detection technique is ELSD, which allows you to see low concentrations of guanine. The temperature of the ELSD must be maintained relatively low to insure proper sensitivity of the method. This method can be used for analysis of other guanidine-based compounds. If substituted guanidine has hydrophobic properties, it will retain based on ion-exchange and reverse phase mechanisms.

Method Parameters

Detection	ELSD Detection

Quelle: https://sielc.com/Application-HPLC-Application-For-Retention-of-Guanidine-By-Mixed-Mode-Chromatography