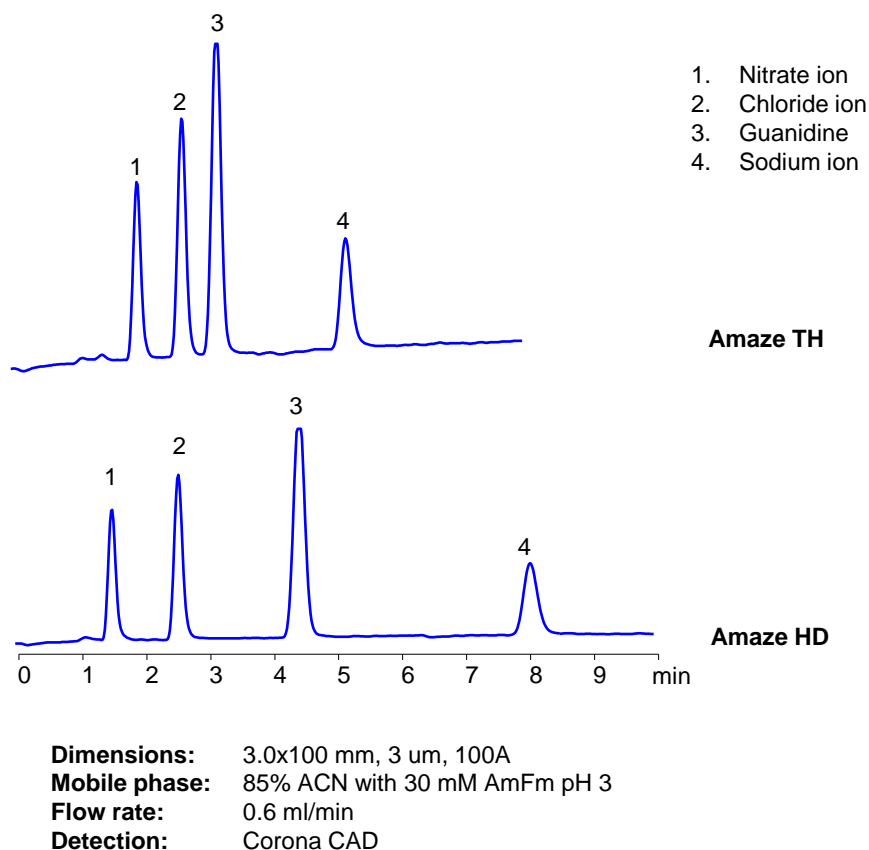


## HILIC Mixed-Mode Separations – What is Involved?



**Fig. 1** HPLC Analysis of Guanidine and Counterions in in HILIC Ion-Exchange and HILIC Ion-Exclusion Modes

## Application Notes

HILIC approach to the analysis of polar compounds is much more versatile if you add another interaction or two, to the mechanisms of retention. This allows you to achieve a longer retention and a better control for retention of hydrophilic ionic compounds. Mixed-mode approach can be used for analysis of both cations and anions with simple isocratic methods. Here are two examples of separation of acidic and basic ions in HILIC mixed-mode with LC/MS compatible conditions. You can see how resolution changes when you explore different mechanisms to control the elution.

**Amaze TH** retains and separates compounds based on HILIC, cation-exchange and anion-exchange mechanisms.

**Amaze HD** retains and separates compounds based on HILIC, cation-exchange and anion-exclusion mechanisms.

If you know how to control mechanisms of interactions, then you know how to develop robust and efficient methods. If you are not sure what mechanism to explore and how to control them, you know the place where to find experts in mixed-mode interactions [www.helixchrom.com](http://www.helixchrom.com).