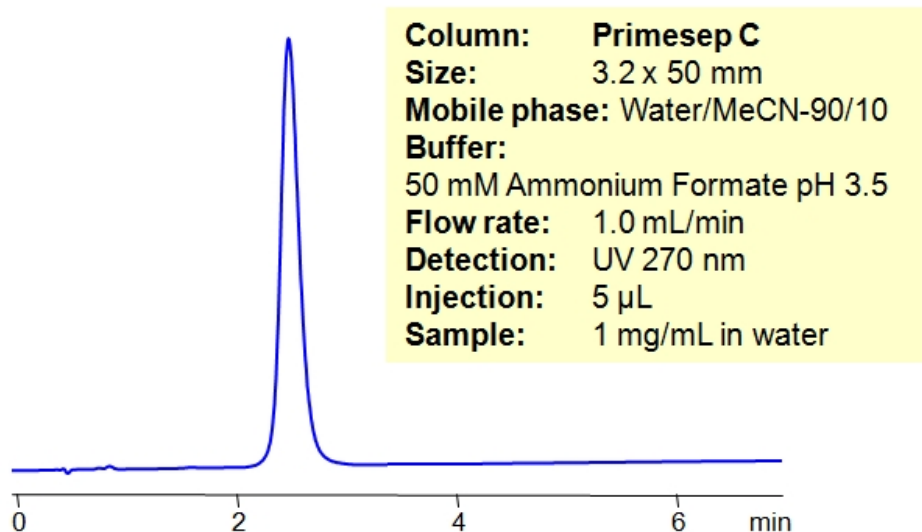


## HPLC Retention of Obidoxime

<https://sielc.com/Application-HPLC-Retention-of-Obidoxime>

### Chromatogram



*Obidoxime\_chr\_242*

### Description

Obidoxime is a highly polar compound containing two quaternary amines linked by short hydrophilic chain. It is not retained well in reverse phase chromatography and produces severe tailing due to interaction with residual silanol groups of reverse phase HPLC columns. Obidoxime is retained on Primesep C column by strong cation-exchange and weak reverse phase mechanisms. Primesep C column has carboxylic group on the silica surface which shields residual silanols from interacting with quaternary amine, thus providing improved peak shape for quaternary amine. Retention time of hydrophilic quaternary amine can be adjusted by pH and buffer concentration. This reliable and fast method can be used to retain and quantitate obidoxime and other polar hydrophilic quaternary amine on Primesep C column. Different buffers and detection techniques can be used to monitor purity of obidoxime. Obidoxime is a member of the oxime family used to treat nerve gas poisoning. Oximes are drugs known for their ability to reverse the binding of organophosphorus compounds to the enzyme acetyl cholinesterase.