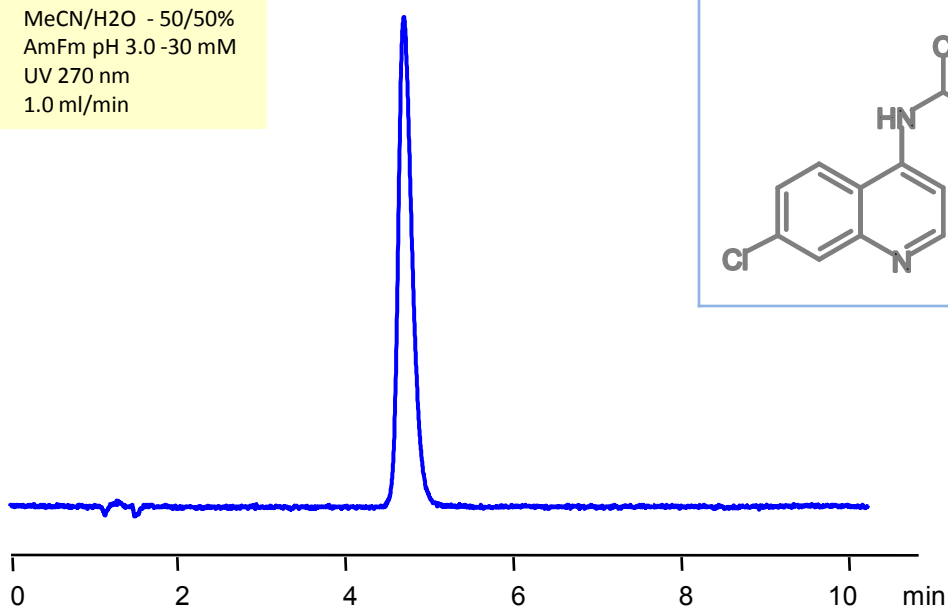


# Cool Applications

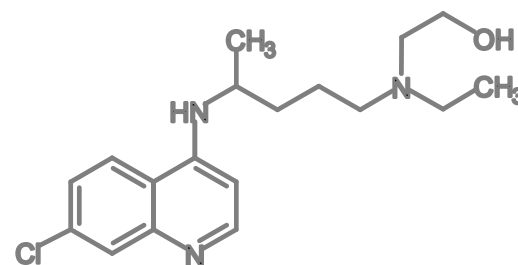
"Making Tough LC Applications Look Cool"

## MS Compatible Hydroxychloroquine Method

**Column:** Obelisc R  
**Size:** 4.6 x 100 mm  
**Mobile phase:** MeCN/H<sub>2</sub>O - 50/50%  
**Buffer:** AmFm pH 3.0 -30 mM  
**Detection:** UV 270 nm  
**Flow rate:** 1.0 ml/min



Hydroxychloroquine



### Application Comments

Hydroxychloroquine is used in prevention and treatment of malaria and various autoimmune rheumatic diseases. It is orally administered and rapidly absorbed. It has also been given the green light to be prescribed 'off-label' for the COVID-19 (Coronavirus). Hydroxychloroquine poses a challenge when using reverse-phase HPLC columns due to the polar charged amino groups and a hydroxy group making the molecule non retentive. One method that is usually employed requires an ion-pairing reagent to retain such a polar compound.

If the MS-compatible method or gradient is required then ion-pairing reagents cannot be used. SIELC Obelisc column offers an alternative retention mechanism. Hydroxychloroquine can be retained on silica-based Obelisc R mixed-mode column with ideal peak shape using acetonitrile (ACN, MeCN) in isocratic or gradient mode and MS-compatible ammonium formate as a buffer.

The method can be modified to be faster if columns with smaller particles are used. Visit [www.sielc.com](http://www.sielc.com) to learn more about Obelisc R columns.

**SIELC offers free and confidential method development with all your challenging applications.**