

# HPLC Application

ID No.: 25942

## Rapid Sample Extraction of Chloroquine, Hydroxychloroquine, and Desethylchloroquine from Serum for LC-MS/MS

**Column:** Kinetex® F5 2.6µm 100 Å, LC Column 50 x 2.1 mm, Ea

**Dimensions:** 50 x 2.1 mm ID

**Order No:** 00B-4723-AN

**Elution Type:** Gradient

**Eluent A:** 0.1 % Formic acid in water

**Eluent B:** Methanol

| Gradient Profile: | Step No. | Time (min) | Pct A | Pct B |
|-------------------|----------|------------|-------|-------|
|                   | 1        | 0          | 98    | 2     |
|                   | 2        | 2          | 93    | 7     |
|                   | 3        | 3          | 85    | 15    |
|                   | 4        | 3.2        | 60    | 40    |
|                   | 5        | 4.2        | 5     | 95    |
|                   | 6        | 6          | 98    | 2     |

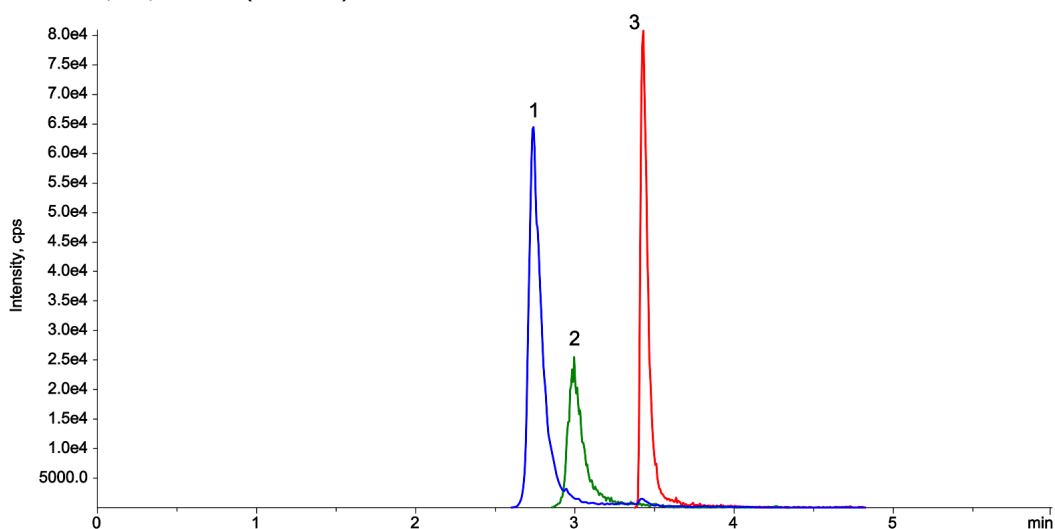
**Flow Rate:** 0.5 mL/min

**Col. Temp.:** 20 °C

**Detection:** LC/MS/MS @ (ambient)



Products used in this application:



### ANALYTES:

- 1 Desethylchloroquine
- 2 Hydroxychloroquine
- 3 Chloroquine



# Sample Preparation Details

for HPLC Application ID No.: 25942

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### PRODUCT DESCRIPTION:

Impact™ Protein Precipitation, 2mL Square Well Filter Plate, 2/Pk

Order No.: CE0-7565

### SOLID PHASE EXTRACTION (SPE) PROCEDURE:

**Note:** The solvent volumes shown below are for a bed mass.

The solvent volumes will need to be adjusted for a smaller or larger bed mass.

#### Condition:

#### Load:

#### Wash:

#### Dry:

#### Elute:

#### Final Prep and Analysis:

Inject: 10 µL on HPLC LC/MS/MS @ (ambient)

| ANALYTES: |                     | Spiked Conc.<br>(ng/mL) | Log P | pKa | % Rec | %RSC<br>(n=0) |
|-----------|---------------------|-------------------------|-------|-----|-------|---------------|
| 1         | Desethylchloroquine | 0                       |       |     |       |               |
| 2         | Hydroxychloroquine  | 0                       |       |     |       |               |
| 3         | Chloroquine         | 0                       |       |     |       |               |

**Note:** This method is designed as a convenient starting point for further investigation and can be tailored to meet your extraction goals.  
Call your local Phenomenex Representative for assistance in method development and optimization techniques.

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For more information contact your Phenomenex Representative at support@phenomenex.com



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