

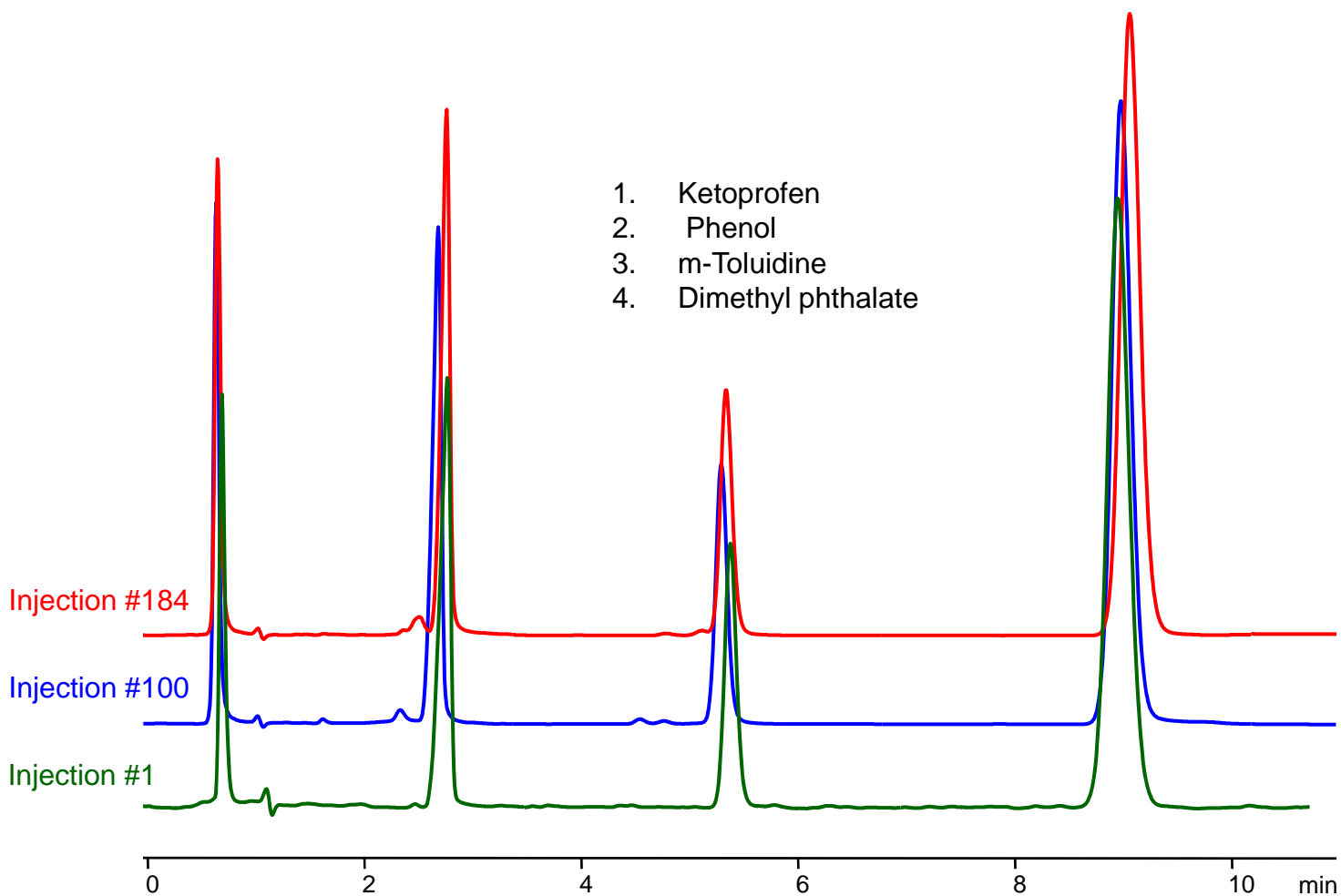
# Stability of Newcrom R1 Stationary Phase @ Basic pH Study.

**Newcrom R1** stationary phase is generally stable at basic pH .

Column recommended pH operational range is from 1.0 to 10.0.

As an example, we perform a test where the column was operated at pH 10.6 injecting a model mixture of a neutral, basic, and acidic compounds. This experiment took over 15 hrs and after almost 200 injections no significant lost or changes of retention were observed, see picture below.

However despite the fact that this stationary phase is stable at high pH it is recommended for column storage to use acidic mobile phase. A mobile phase composition with 0.1% phosphoric or formic acid in 50/50 mixture of MeCN/H<sub>2</sub>O should be an ideal long and short term storage solution.



**Column:** Newcrom R1  
**Column size:** 3 x 100 mm, 3  $\mu$ m  
**Mobile phase:** MECN/H<sub>2</sub>O – 30/70 +  
NH<sub>4</sub>OH - 20 Mm pH 10.6  
**Flow rate:** 0.5 mL/min  
**Detection:** UV 270 nm  
**Injection:** 2  $\mu$ L  
**Pressure:** 128 Bar