Cefixime

The method for a 200 mg cefixime tablet published in the Minilab manual, Volume II, Supplement 2010, pages 12-15, was modified after testing because the spots on the plate were streaked, as shown below. This made visual comparison of spot intensities on the plate difficult.

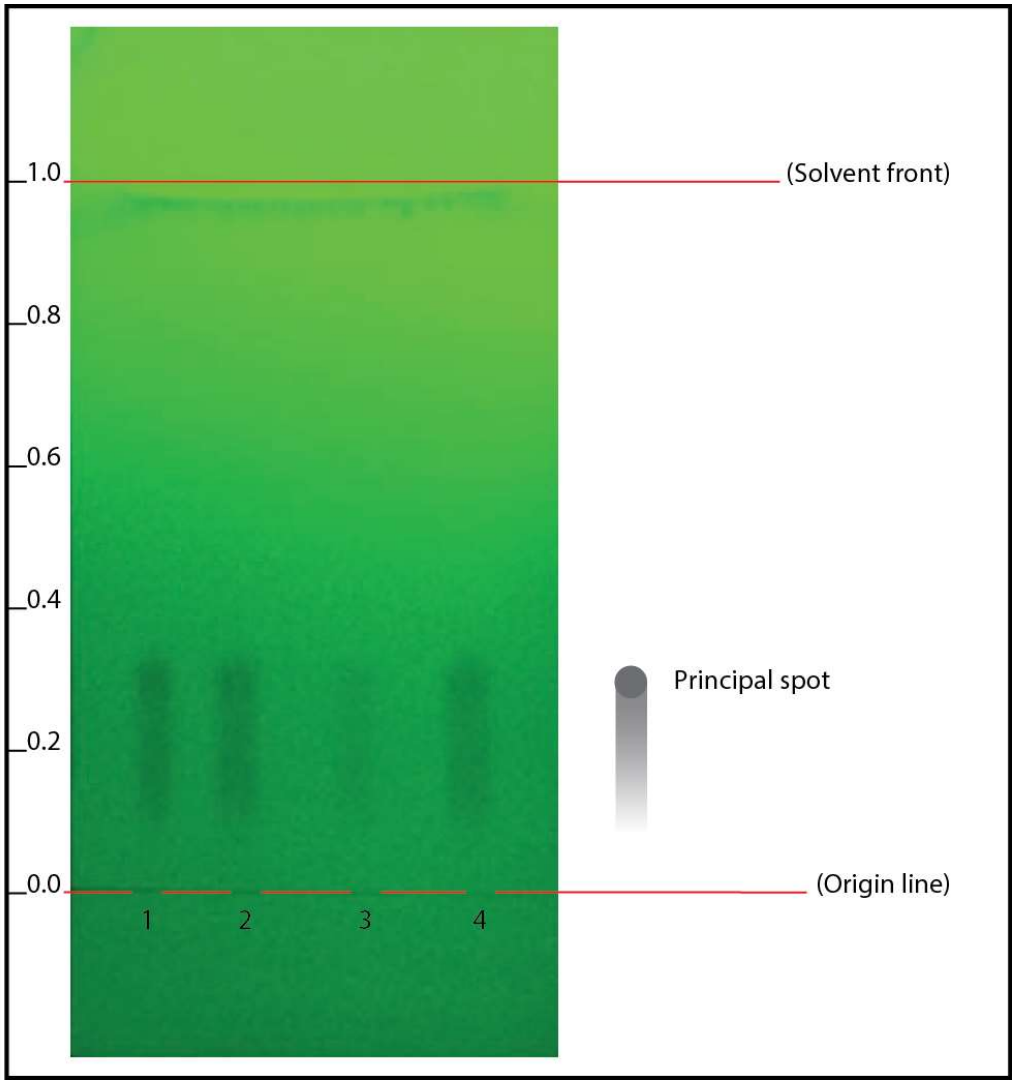
XI. CHROMATOPLATE OBSERVED UNDER 254 NM UV LIGHT

Run No.1:
Upper working standard representing 100% of total anhydrous cefixime

Run No.2:
A drug product of good quality with acceptable drug content

Run No.3:
A drug product of poor quality with unacceptable low drug content*

Run No.4:
Lower working standard representing 80% of total anhydrous cefixime



In the modified method the exact procedures published in the Minilab manual were carried out with two exceptions. Instead of a 200 mg reference tablet for the standard, 200 mg of commercial analytical grade standard (Cefixime, USP No. 1097658) was used. Also, the original mobile phase that gave streaking, ethyl acetate-acetone-glacial acetic acid-water (12.5:5:5:2.5), was replaced by methanol-water-glacial acetic acid (70:20:1). The resultant chromatograms with compact spots are shown below. The compact spots made comparison of intensities more accurate.

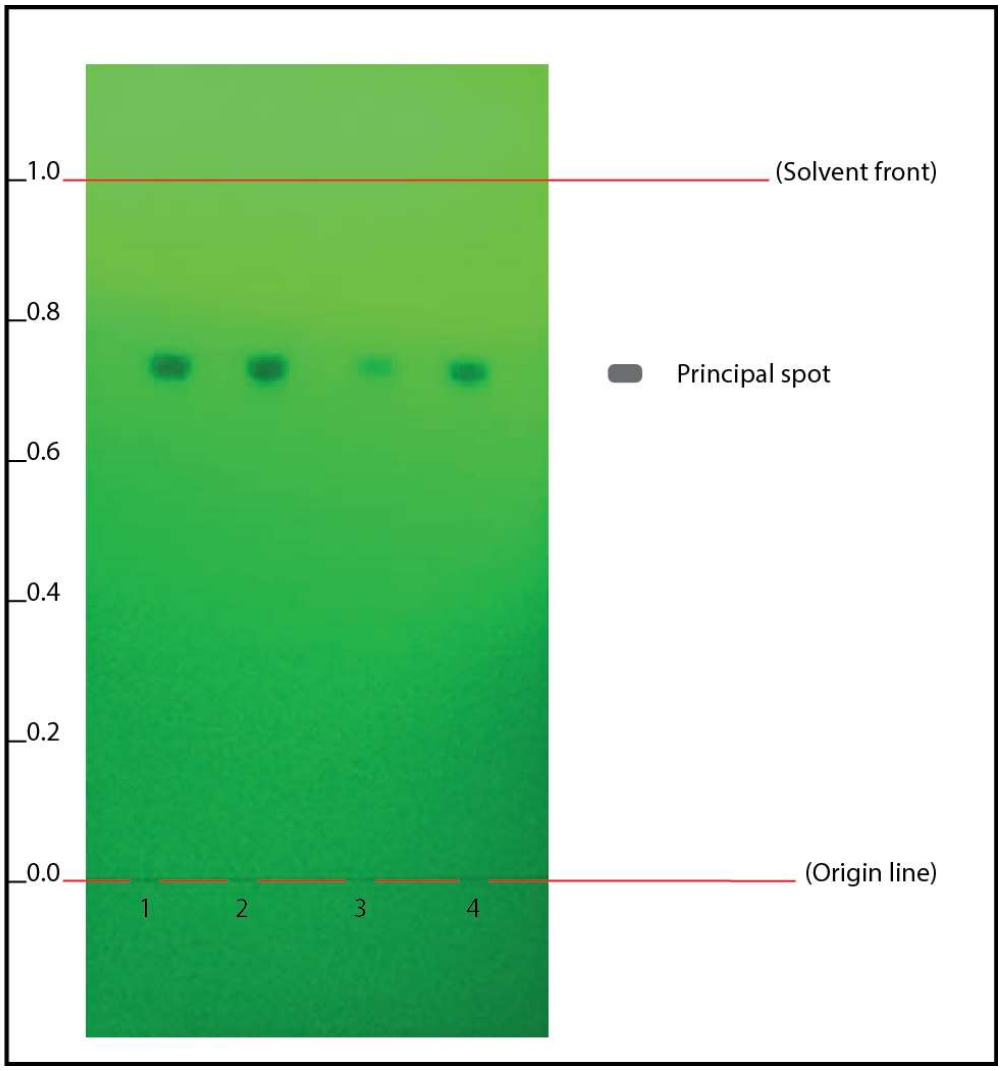
XI. CHROMATOPLATE OBSERVED UNDER 254 NM UV LIGHT

Run No.1:
Upper working standard representing 100% of total anhydrous cefixime

Run No.2:
A drug product of good quality with acceptable drug content

Run No.3:
A drug product of poor quality with unacceptable low drug content*

Run No.4:
Lower working standard representing 80% of total anhydrous cefixime



(*A drug product of poor quality was simulated by diluting the 100% working sample solution of a drug product of good quality with methanol to one-third of the theoretical value.)

This modified method was developed and tested by Ellen Armour and Joseph Sherma, Department of Chemistry, Lafayette College, Easton, PA, USA., June, 2016.