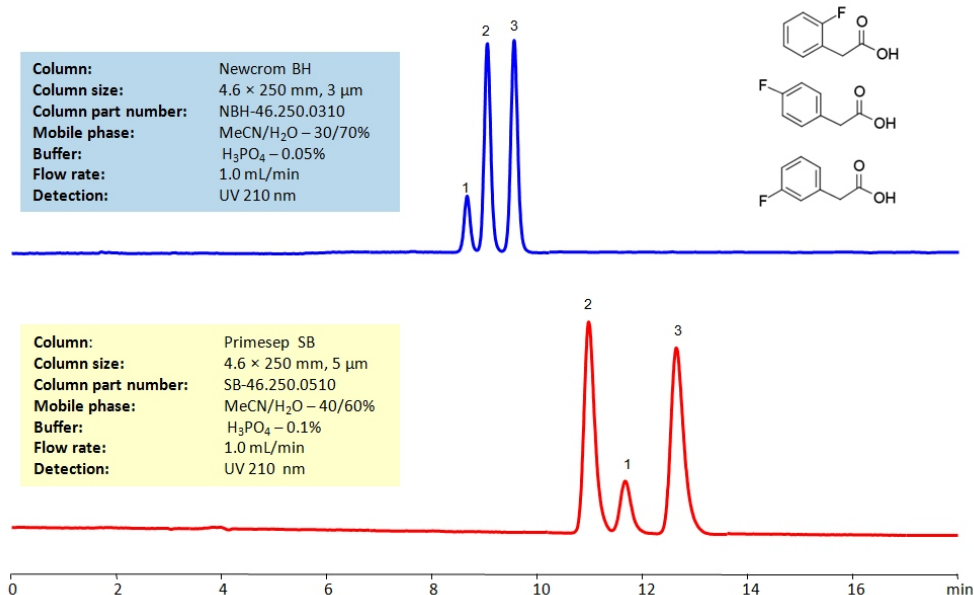


HPLC Separation of 2-Fluorophenylacetic acid, 4-Fluorophenylacetic acid, 3-Fluorophenylacetic acid on Primesep SB Column

1. 2-Fluorophenylacetic acid (2-FPAA)
2. 4-Fluorophenylacetic acid (4-FPAA)
3. 3-Fluorophenylacetic acid (3-FPAA)



High Performance Liquid Chromatography (HPLC) Method for Analysis of 2-Fluorophenylacetic acid , 4-Fluorophenylacetic acid, 3-Fluorophenylacetic acid

2-Fluorophenylacetic acid is a popular chiral derivatizing agent used in ¹⁹F NMR spectroscopy. 3-Fluorophenylacetic acid is a common precursor for synthesizing various pentaamine and bis-heterocyclic compounds. 4-Fluorophenylacetic acid is a common intermediary compound used to produce fluorinated anesthetics. While these 3 compounds all have the same chemical formula, the position of the Fluoride group varies between them, changing slightly their retention and chromatographic characteristics.

All 3 isomers can be measured at low UV. Using a Primsep SB reverse-phase columns and a mobile phase consisting of acetonitrile (MeCN) and water with either formic acid or acetic acid buffer, these fluorophenylacetic acid isomers can be retained, separated, and UV detected at 210 nm with precise resolution.

Method Parameters

Column	Primesep SB, 4.6×250 mm, 5 µm, 100 Å
Mobile Phase	MeCN/H ₂ O – 40/60%
Buffer	H ₃ PO ₄ – 0.1%
Flow Rate	1.0 mL/min
Detection	UV 210 nm

Quelle: <https://sielc.com/hplc-separation-of-2-fpaa-4-fpaa-3-fpaa>