Introduction

HPLC with an Agilent Polaris C18-A column separates three 18-carbon fatty acids in under 52 seconds using an isocratic eluent.
Conditions

Column: Agilent Polaris C18-A, 4.6 x 30 mm, 3 µm
Part no.: A2001030X046
Eluent: A: H₂O + 0.1% HCOOH B: MeCN + 0.1% HCOOH A:B = 5:95
Flow: 1.5 mL/min
Detection: UV @ 205 nm
Sample: 1. linolenic acid, 2. linoleic acid, 3. oleic acid
Injection Volume: 2 µL

Three 18-carbon fatty acids are separated in under 52 seconds using an isocratic eluent.
oleic = CH₃(CH₂)₇CH=CH(CH₂)₇COOH
linoleic = CH₃(CH₂)₄CH=CHCH=CH(CH₂)₇COOH
linolenic = CH₂CH₂CH=CHCH=CHCHCH=CH(CH₂)₇COOH