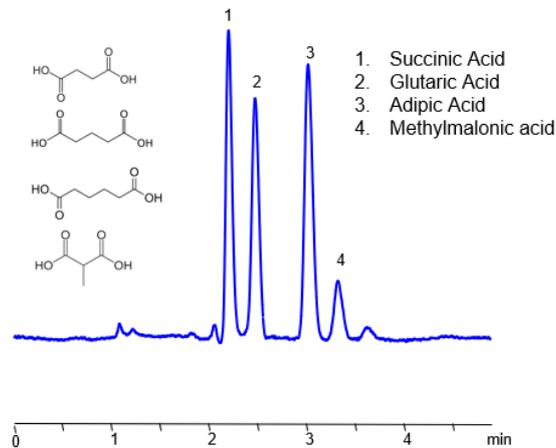


HPLC Method for Analysis of Dibasic Acids on Newcrom B Column



Column:	Newcrom B
Size:	4.6 x 150 mm, 3 µm, 100 Å
Column part number:	NB-46.150.0310
Mobile phase:	MeCN/H ₂ O – 5/95%
Buffer:	H ₂ SO ₄ – 0.02%
Flow:	1.0 mL/min
Detection:	UV 200 nm

High Performance Liquid Chromatography (HPLC) Method for Analysis of Adipic Acid , Succinic Acid , Glutaric acid , Methylmalonic Acid .

Succinic acid is a key intermediary (in the form of its anion, succinate) in the electron transport chain, a process that is the key power source for our cells. It also has a few limited functions outside of the mitochondria. It has the chemical formula C₄H₆O₄ .

Glutaric acid is a common plasticizer precursor with the chemical formula C₅H₈O₄ . It is often used in the production of polyester polyols and polyamides. Interestingly, it is significantly more water soluble than either Succinic or Adipic acid.

Adipic acid , also known as hexanedioic acid , is a key precursor to nylon, and more than 2.5 billion kilograms are produced every year. In medicinal uses, it has been incorporated into controlled-release formulation as well as the polymeric coating of hydrophilic monolithic systems. It has the chemical formula C₆H₁₀O₄ .

Methylmalonic Acid is an organic acid with the chemical formula C₄H₆O₄ . It works as an intermediate in the breakdown of certain amino acids and fatty acids. Elevated levels of Methylmalonic acid can be a sign of a Vitamin B12 deficiency or Methylmalonic acidemia, which is a rare genetic disorder where the previously mentioned acid is not properly metabolized.

Adipic Acid , Succinic Acid , Glutaric acid , Methylmalonic Acid can be separated, retained, and analyzed on a mixed-mode Newcrom B column with a mobile phase consisting of water, Acetonitrile (MeCN), and Sulfuric acid (FA). This analytical method can be UV detected at 200 nm with high resolution and peak symmetry.

Method Parameters

Column	Newcrom B, 4.6 x 150 mm, 3 µm, 100 Å, dual ended
Mobile Phase	MeCN/H ₂ O -5/95%
Buffer	H ₂ SO ₄ – 0.02%
Flow Rate	1.0 mL/min
Detection	UV 200 nm

Quelle: <https://sielc.com/hplc-method-for-analysis-of-Dibasic-acids-on-newcrom-b>