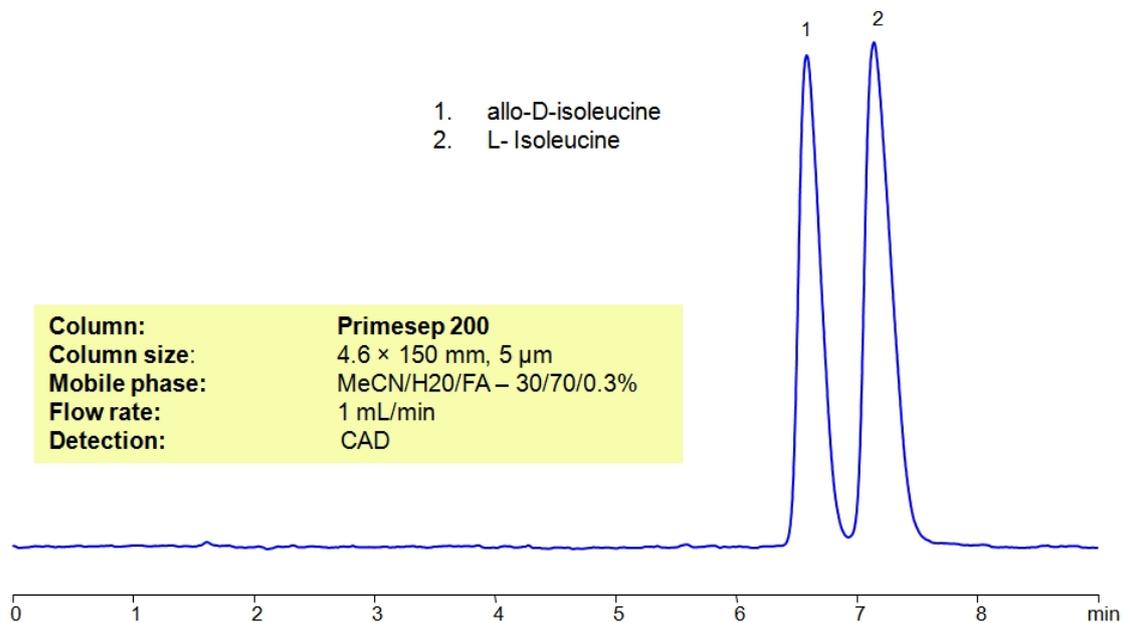


Separation of allo-D-isoleucine and L- Isoleucine on Primesep 200



High Performance Liquid Chromatography (HPLC) Method for Analysis of L-Isoleucine , allo-D-isoleucine

Allo-D-isoleucine is a non-proteinogenic amino acid with C₆H₁₃NO₂ molecular formula. It is most commonly used in protein synthesis, neuroprotection, and immune modulation. It is also crucial in synthesis of peptides and can support muscle growth and recovery.

L- Isoleucine is a branched-chain amino acid with C₆H₁₃NO₂ molecular formula. During chemical reactions, it serves as a nitrogen donor. It is also involved in glucose consumption, fatty acid metabolism, and immune functions. It can be found in a variety of animal and plant products, including meat, eggs, dairy, soybeans, lentils, peas, nuts, and seeds. Healthcare providers may encourage athletes and people with muscle atrophy to take it as a supplement. Excessive consumption of it may lead to side effects including nausea, vomiting, and diarrhea.

L-Isoleucine , allo-D-isoleucine can be retained and analyzed using the Primesep 200 stationary phase column. The analysis utilizes an isocratic method with a simple mobile phase consisting of water and acetonitrile (MeCN) with a trifluoroacetic acid buffer. Detection is performed using CAD.

Method Parameters

Column	Primesep 200, 4.6x150 mm, 5 µm, 100 Å
Mobile Phase	MeCN/H ₂ O
Buffer	TFA, FA
Flow Rate	1.0 mL/min
Detection	CAD (Corona) MS- compatible mobile phase

Quelle: <https://sielc.com/separation-of-allo-d-isoleucine-and-l-isoleucine-on-primesep-100-hplc-column-2>