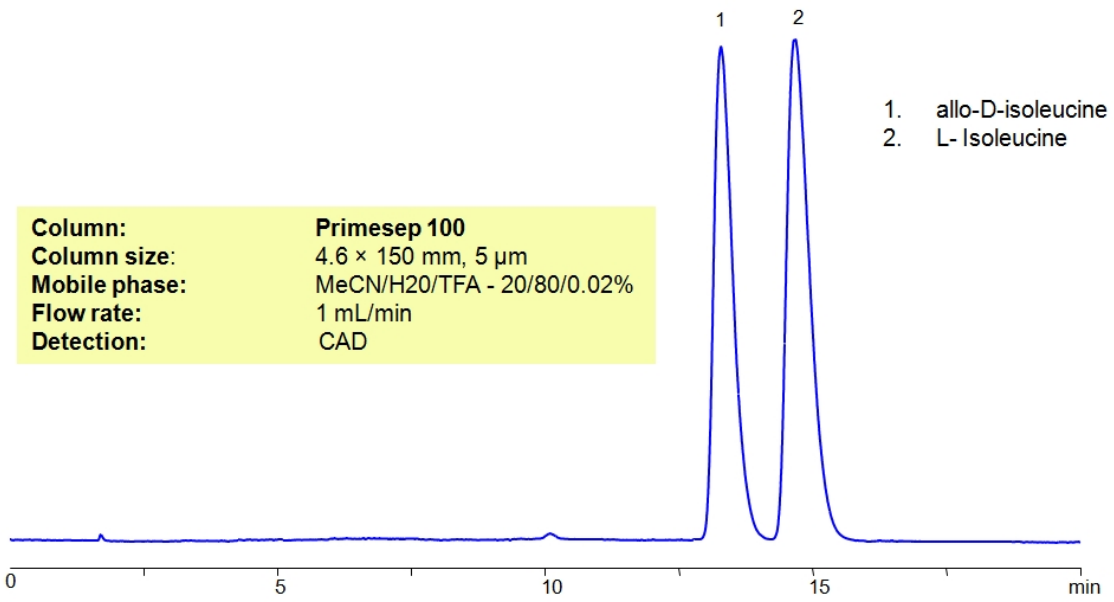
Separation of allo-D-isoleucine and L- Isoleucine on Primesep 100



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

Allo-D-isoleucine is a non-proteinogenic amino acid with C6H13NO2molecular 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 C6H13NO2molecular 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.

Isoleucine , L-Isoleucine , allo-D-isoleucine can be retained and analyzed using the Primesep 100 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.

AugustaChrom - Dr. Roland Kießwetter
Tel.: +49 821 599 783 70
Fax: +49 821 599 783 71
E-Mail: info@hplc-shop.de

Method Parameters

Column	Primesep 100, 4.6×150 mm, 5 µm, 100 Å
Mobile Phase	MeCN/H2O
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