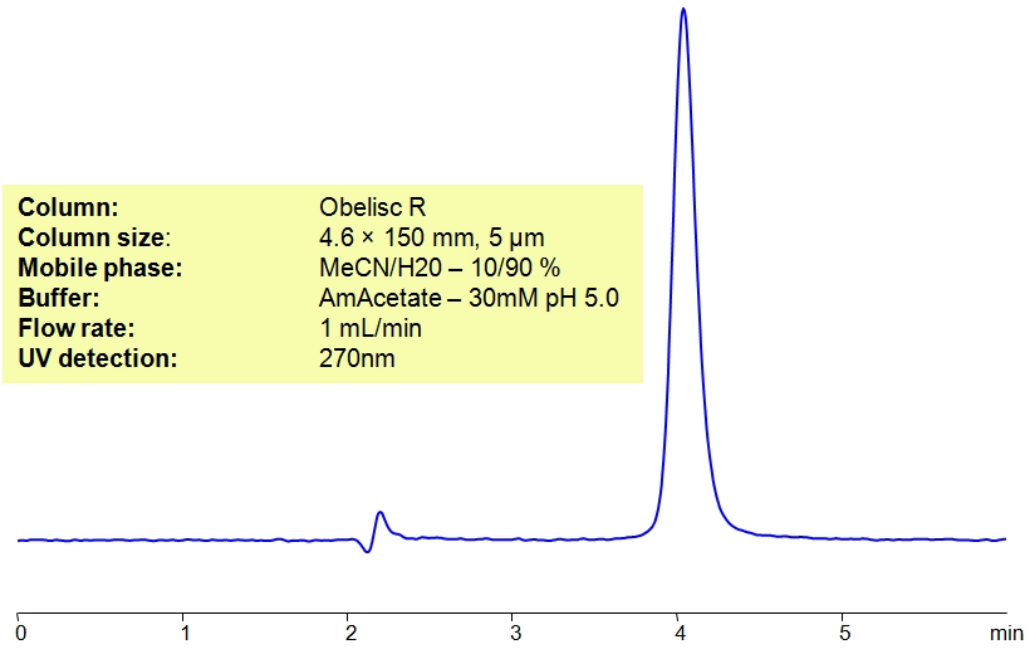
HPLC Method for Analysis of Desmosine



High Performance Liquid Chromatography (HPLC) Method for Analysis of Desmosine

Desmosine is pyridinium-based amino acid derivative with C24H40N5O8 + molecular formula. It is found exclusively in elastin. Elevated levels of desmosine in urine can be a symptom of Chronic Obstructive Pukmonary Disease (COPF), so it can be used as a biomarker when monitoring progression and aiding in a potential diagnosis.

Desmosine can be retained and analyzed using the Obelisc R stationary phase column. The analysis utilizes an isocratic method with a simple mobile phase consisting of water and acetonitrile (MeCN) with an ammonium acetate buffer. Detection is performed using UV.

Method Parameters

Column	Obelisc R, 4.6 x 150 mm, 5 µm, 100 Å, dual ended
Mobile Phase	MeCN – 10%
Buffer	AmAcetate – 30 mM pH 5.0
Flow Rate	1.0 mL/min
Detection	UV 270 nm

Quelle: https://sielc.com/hplc-method-for-analysis-of-desmosine