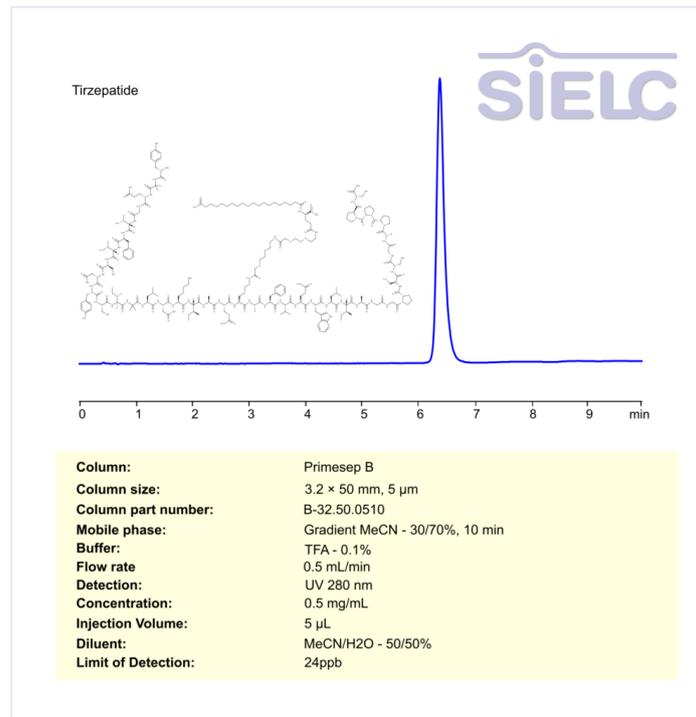


HPLC Method for the Analysis of Tirzepatide in Pharmaceutical Formulation Mounjaro on Primesep B Column



Tirzepatide is a synthetic peptide that functions as a dual agonist of the GLP-1 and GIP receptors. It is used in the treatment of type 2 diabetes and obesity. By mimicking the actions of both glucagon-like peptide-1 (GLP-1) and gastric inhibitory polypeptide (GIP), tirzepatide enhances insulin secretion, reduces blood sugar levels, promotes satiety, and aids in weight loss.

Tirzepatide can be retained and analyzed using the Primesep B stationary phase column. The analysis utilizes a gradient method with a simple mobile phase consisting of water, acetonitrile (MeCN), and TFA. Detection is performed using UV at 280 nm.

*LOD was determined for this combination of instrument, method, and analyte, and it can vary from one laboratory to another even when the same general type of analysis is being performed.

Method Parameters

Column	Primesep B, 3.2 x 50 mm, 5 µm, 100 Å, dual ended
Mobile Phase	Gradient MeCN – 30-70%, 10 mn
Buffer	TFA – 0.1%
Flow Rate	0.5 mL/min
Detection	UV 280 nm
Limit of Detection	24 ppb

Quelle: <https://sielc.com/hplc-method-for-analysis-tirzepatide>