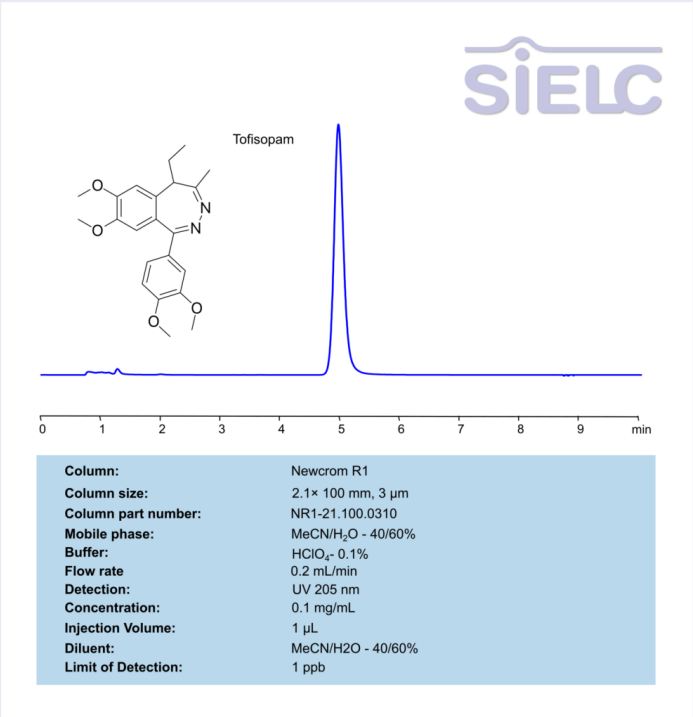
HPLC Method for the Analysis of Tofisopam on Newcrom R1 Column



Column:	Newcrom R1
Column size:	2.1× 100 mm, 3 µm
Column part number:	NR1-21.100.0310
Mobile phase:	MeCN/H_2O - 40/60%
Buffer:	$HClO_4$- 0.1%
Flow rate	0.2 mL/min
Detection:	UV 205 nm
Concentration:	0.1 mg/mL
Injection Volume:	1 µL
Diluent:	MeCN/H2O - 40/60%
Limit of Detection:	1 ppb

Tofisopam is an anxiolytic medication belonging to the benzodiazepine class, but it differs from traditional benzodiazepines in that it has no significant sedative, muscle relaxant, or anticonvulsant properties. It is mainly used to treat anxiety and stress-related disorders while allowing the user to remain alert and functional.

Unlike classic benzodiazepines like diazepam or alprazolam, tofisopam does not cause drowsiness and has a lower potential for addiction and dependence. It is commonly prescribed in some countries, particularly in Eastern Europe and parts of Asia, but is not widely available in the U.S. or many Western countries.

Tofisopam can be retained and analyzed using the Newcrom R1 column. The analysis utilizes an isocratic method with a simple mobile phase consisting of water, acetonitrile (MeCN), and HClO4. Detection is performed using UV at 205 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.

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	Newcrom R1, 2.1 x 100 mm, 3 µm, 100 Å, dual ended
Mobile Phase	MeCN/H2O – 40/60%
Buffer	HClO4 – 0.1%
Flow Rate	0.2 mL/min
Detection	UV 205 nm
Limit of Detection	1 ppb

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