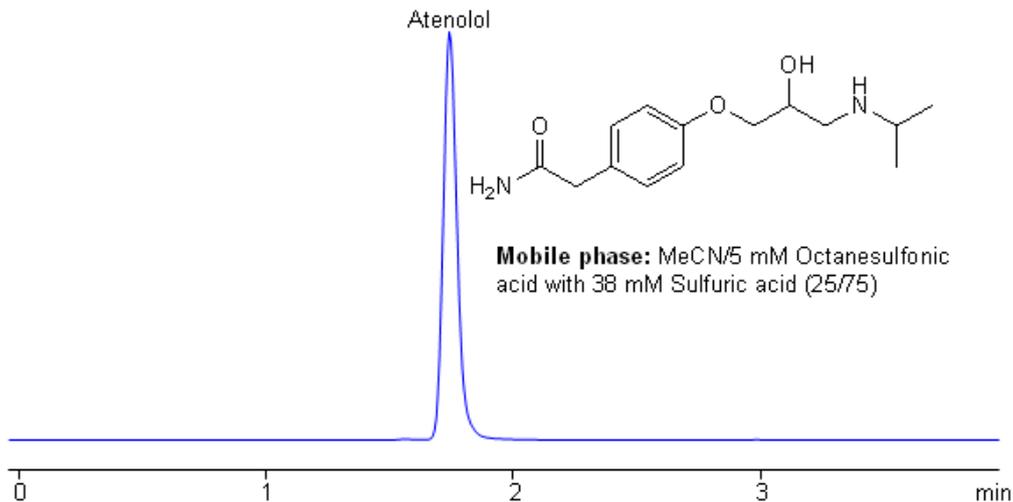


## HPLC Separation of Atenolol on Legacy L1 Column

**Column:** Legacy L1  
**Size:** 4.6 x 150 mm  
**Mobile phase:** MeCN/5 mM Octanesulfonic acid with 38 mM Sulfuric acid (25/75)  
**Flow:** 1.0 mL/min  
**Detection:** UV 270 nm



Atenolol is a selective beta receptor antagonist, a drug belonging to beta blockers. The USP method was reproduced on the L1 column. This method can be used for the analysis of atenolol by reversed-phase chromatography on a typical C18HPLCcolumn. Column and method can be used for other drug substances, intermediates and impurities which need to be analyzed according to the United States Pharmacopeia.

Application Notes: Atenolol is a beta blocker used to treat heart disease as well as thyroid disorders and alcohol withdrawal. The USP HPLC method for the separation of atenolol was developed on Legacy L1 column according to the US Pharmacopeia methodology. L1 classification is assigned to reversed-phase HPLC column containing C18 ligand. Support for the material is spherical silica gel with particles size 3-10  $\mu\text{m}$  and pore size of 100-120  $\text{\AA}$ . Resolution between critical pairs corresponds to rules and specifications of UPS.

SIELC's family of Legacy columns is based on the United States Pharmacopeia's (USP) published chromatographic methods and procedures. Numerous brands have columns used in USP reference standards and methods. USP has created various designations to group together columns with similar types of packing and properties in the solid phase. SIELC's Legacy columns adhere to these strict requirements and properties, allowing you to easily replace older columns that are no longer available without needing to significantly modify your method or SOPs.

## Method Parameters

<b>Column</b>	Primesep 100, 4.6x150 mm, 5 µm, 100 Å
<b>Mobile Phase</b>	MeCN
<b>Buffer</b>	Octanesulfonic Acid, Sulfuric Acid
<b>Flow Rate</b>	1.0 mL/min
<b>Detection</b>	UV, 270 nm

Quelle: <https://sielc.com/Application-HPLC-Separation-of-Atenolol-on-Legacy-L1-Column>