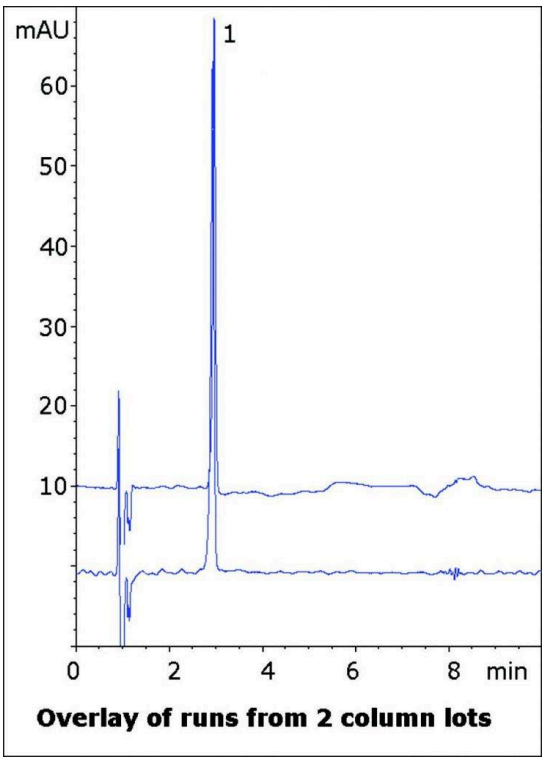
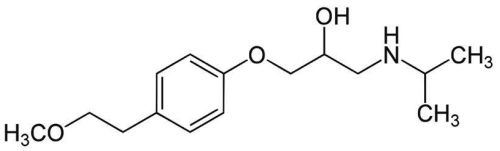
Metoprolol Tartrate Analyzed with HPLC - AppNote

Excellent Peak Shape for an Organic Amine

This Assay is easy to perform with a well-retained analyte Peak. Since Peak Tailing can often be an issue with organic amines, such as this compound, using conventional HPLC Columns it is notable that this Method produces a very Symmetrical Peak.

In the Chromatogram below, an overlay of injections from two lots of Columns is shown to illustrate Robustness and Precision of the Method which is suitable for routine assay of Metoprolol Tartrate Formulations.





Peak :

Metoprolol

Method Conditions

Column: Cogent Diamond Hydride™, 4 µm, 100 Å
Catalog No.: 70000-7.5P
Dimensions: 4.6 x 75 mm

Mobile Phase:

A: DI Water with 0.1% Trifluoroacetic Acid (TFA) v/v
B: Acetonitrile with 0.1% Trifluoroacetic Acid (TFA) v/v

Gradient:

Time *(minutes)*	%B
0	95
1	95
6	50
7	95

Post Time: 3 minutes
Injection vol.: 1 µL
Flow rate: 1.0 mL / minute
Detection: UV @ 215 nm

Sample Preparation: 1 mg Metoprolol Tartrate USP Reference Standard was dissolved in 1 mL of 50:50 Solvent A / Solvent B. This stock solution was diluted 1:10 for HPLC injections using the same diluent.

t 0 : 0.9 minutes

Note: *Metoprolol is a selective ß1 receptor blocker. It is used to treat various cardiovascular conditions such as hypertension. Various trade names for the drug are available such as Lopressor® and Toprol®. It is sometimes found in combination formulations with hydrochlorothiazide.*

COGENT HPLC Columns™

Attachment No 208 Metoprolol Tartrate Analyzed with HPLC pdf 0.4 Mb Download File

MicroSolv Technology Corporation
9158 Industrial Blvd. NE, Leland, NC 28451
Tel: (732) 380-8900
Fax: (910) 769-9435
Email: customers@mtc-usa.com
Website: www.mtc-usa.com