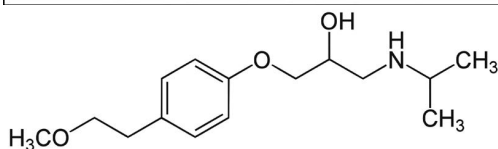
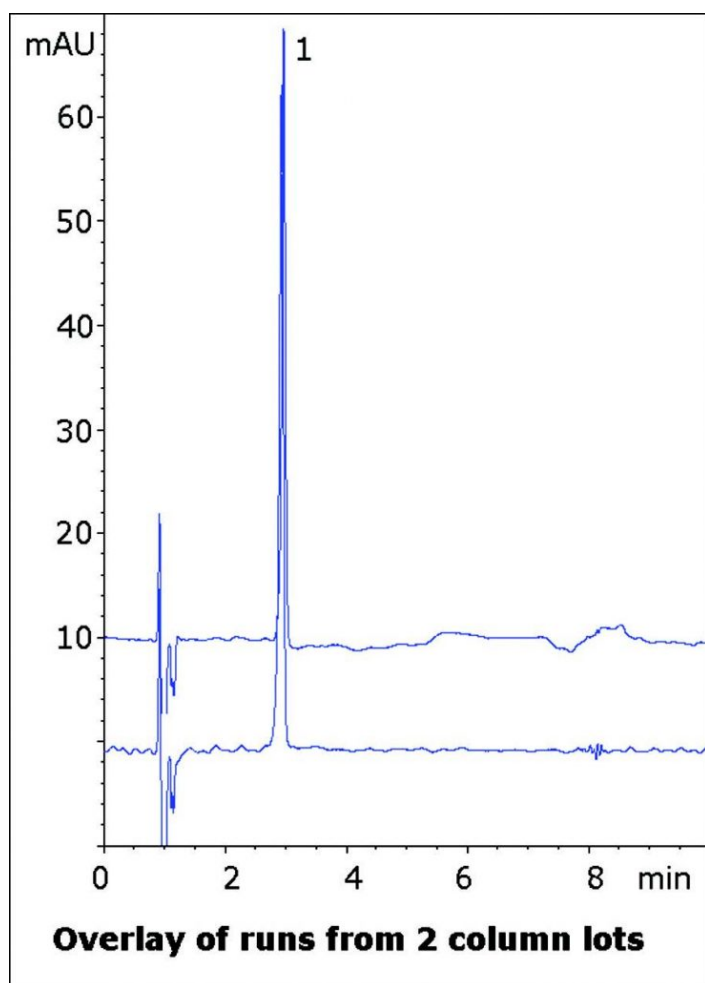


## Metoprolol Tartrate Analyzed with HPLC - AppNote

### 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™, 4µm, 100Å

**Catalog No.:** 70000-7.5P

**Dimensions:** 4.6 x 75mm

**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.:** 1µL

**Flow rate:** 1.0mL / minute

**Detection:** UV @ 215nm

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

**t<sub>0</sub>:** 0.9 minutes

**Note:** Metoprolol is a selective  $\beta_1$  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.



**Attachment**

**No 208 Metoprolol Tartrate Analyzed with HPLC pdf** 0.4 Mb [Download File](#)