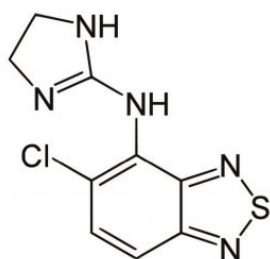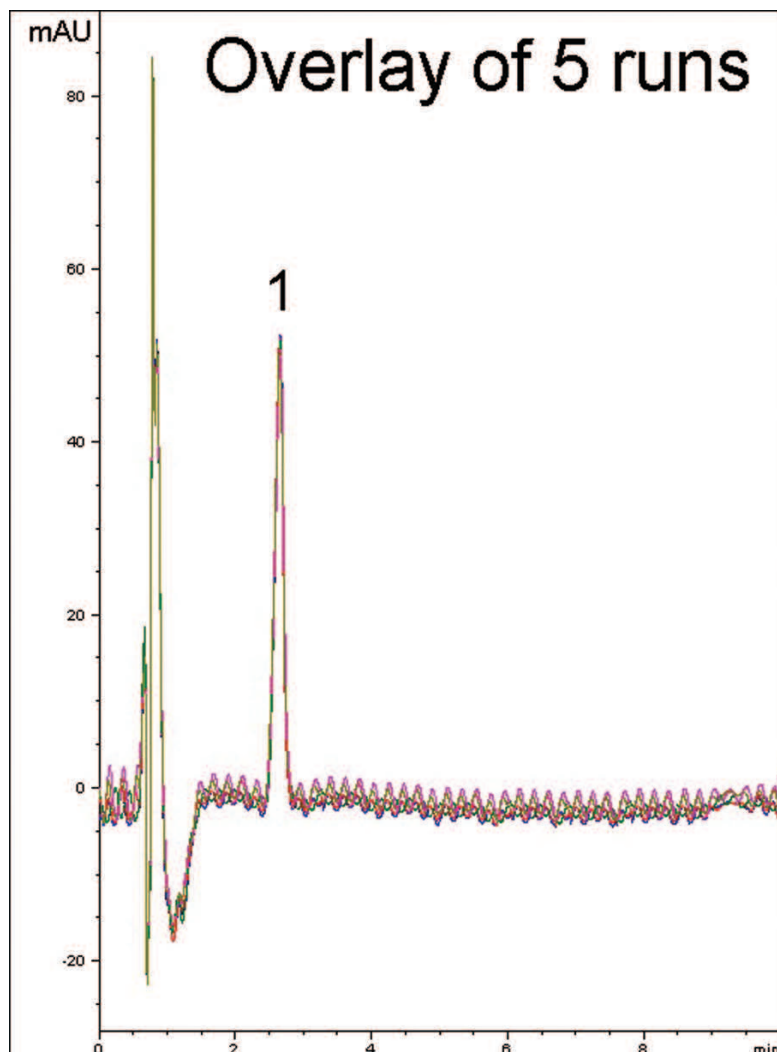## Excellent Run to Run Precision

Tizanidine has several amine groups which can present problems to chromatographers. Residual silanols on the surface of ordinary Silica-based Columns can electrostatically interact with these groups, causing peak tailing.

The Cogent Amide Column, used in the Application Note is virtually free of residual silanols and therefore a symmetrical peak shape can be obtained. An overlay of five consecutive runs demonstrates the run- to-run precision when using these columns.

Tizanidine

Peak:

Tizanidine

Method Conditions

Column: Cogent Amide™, 4µm, 100Å

Catalog No.: 40036-05P

Dimensions: 4.6 x 50mm

Mobile Phase:

  A: 90% DI Water / 10% Acetonitrile / 0.1% Formic Acid (v/v)

  B: Acetonitrile / 0.1% Formic Acid (v/v)

Gradient:

Time (Minutes)	%B
0	90
2	90
6	40
7	90

Flow rate: 1.0 mL/minute

Detection: UV @ 230nm

Injection vol.: 3µL

Sample Preparation:

4 mg strength Tizanidine HCl tablet was ground and weighed in a 10 mL volumetric flask. A portion of 50/50 solvent A/ solvent B diluent was added and the flask was sonicated 10 minutes. It was then diluted to mark and filtered with a 0.45µm Nylon syringe filter (MicroSolv Tech Corp). An aliquot was then diluted 1:10 with a diluent of 10% solvent A / 90%.

Note: Tizanidine is a centrally acting α2- adrenergic agonist used to treat spasms, cramping, tightness of muscles, and related conditions. It is available under the trade name Zanaflex® as well as generic versions.

COGENT
HPLC Columns™

Attachment

No 356 Tizanidine Amide.pdf 0.5 Mb Download File

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