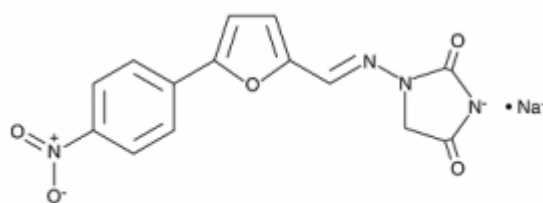
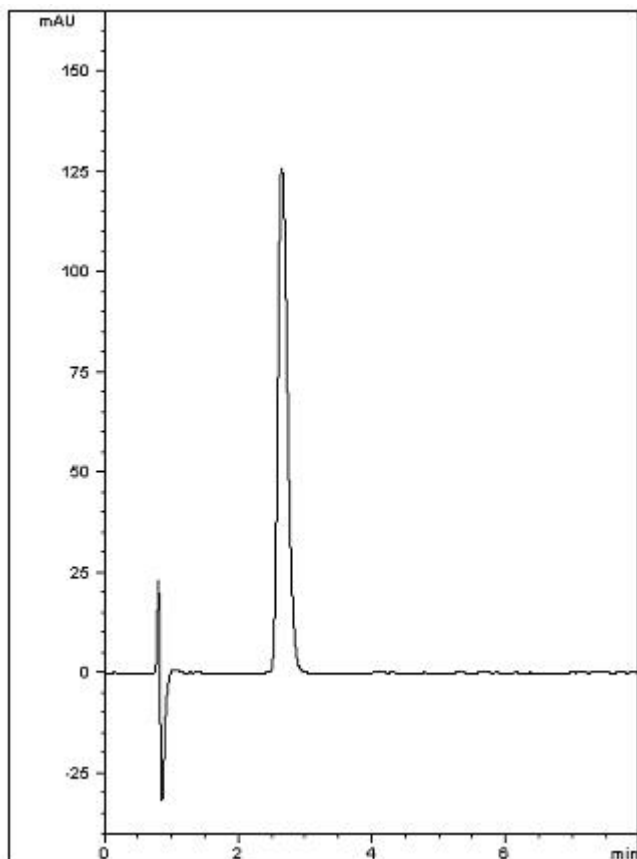


## Dantrolene Sodium Analyzed with HPLC with UV - AppNote

Dantrolene Sodium has several amine groups that can interact with lone-silanols causing problematic peak tailing when analyzed with conventional HPLC columns. By utilizing a Bidentate C18™ Column with its Silica Hydride™ surface, challenging compounds like Dantrolene can be readily retained with symmetrical peak shape.



Dantrolene sodium

Peak:

Dantrolene Sodium

### Method Conditions:

**Column:** Cogent Bidentate C18™, 4µm, 100Å

**Catalog No.:** 40018-75P

**Dimensions:** 4.6 x 75 mm

**Mobile Phase:** 60% DI Water / 40% Acetonitrile / 0.1% Formic Acid (v/v)

**Injection Volume:** 2µL

**Flow Rate:** 1.0ml / min

**Detection:** 225 nm

**Samples:** 0.1 mg/mL Dantrolene Sodium in 50:50 Acetonitrile: DI H2O

**Note:** Essential to muscle contraction are Ryanodine Receptors that regulate the release of Calcium from the Sarcoplasmic Reticulum of muscle cells. Dantrolene Sodium is a postsynaptic muscle relaxant that lessens the "excitation-contraction" coupling response in these cells. It achieves this by inhibiting Calcium binding to Ryanodine

*Receptor 1 and decreasing intracellular Calcium concentrations.*



## **Attachment**

**A384 Dantrolene AppNote pdf** 0.1 Mb [Download File](#)

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