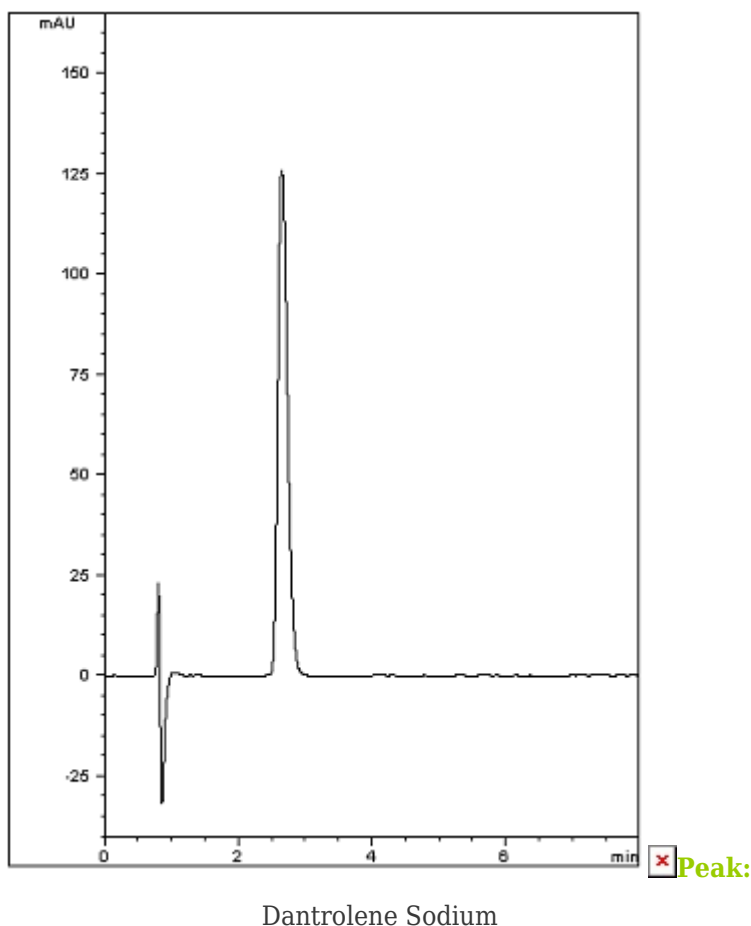


Dantrolene Sodium Analyzed with HPLC with UV – AppNote

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.



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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