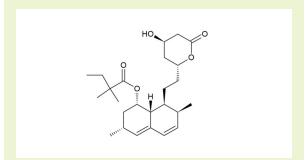
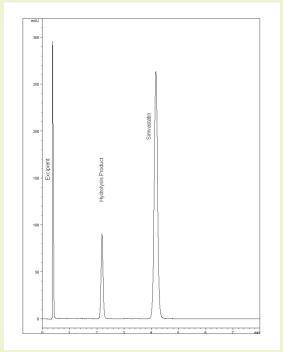


Simvastatin: Excipient & Related

Excellent Peak Shape and Resolution





Notes: Simvastatin is marketed under the trade names Zocor, Simvastatin, Simlup, Simcard and others. It is a hypolipidemic drug belonging to the class of pharmaceuticals called "statins". It is used to control hypercholesterolemia (elevated cholesterol levels) and to prevent cardiovascular disease. Simvastatin is a synthetic derivate of a fermentation product of Aspergillus terreus.

Method Conditions

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

Catalog No.: 40018-75P

Dimensions: 4.6 x 75 mm

Mobile Phase: 40% DI H₂O/ 60% Acetonitrile + 10 mM sodium

phosphate

Injection vol.: 10µL
Flow rate: 1.5 mL/min
Detection: UV 238 nm

Temperature: 30°C

Peaks: 1. Excipient

2. Hydrolysis Product

3. Simvastatin

Discussion

This method is easy to prepare, use and reproduce. Note excellent peak shape and resolution for Simvastatin from its hydrolysis products and tablet excipients. Separation of a degraded Simvastatin tablet, on a Type C Bidentate C18. USP Tailing Factor is 1.02 for Simvastatin.