



## Rifabutin Capsules

### DEFINITION

Rifabutin Capsules contain NLT 90.0% and NMT 110.0% of the labeled amount of rifabutin ( $C_{46}H_{62}N_4O_{11}$ ).

### IDENTIFICATION

- **A. [SPECTROSCOPIC IDENTIFICATION TESTS](#) (197), [Ultraviolet-Visible Spectroscopy](#): 197U**

**Standard solution:** 20 µg/mL of [USP Rifabutin RS](#) in [methanol](#), prepared with the aid of sonication. Pass through a filter of 0.5-µm or finer pore size.

**Sample solution:** Nominally 20 µg/mL of rifabutin prepared as follows. Suspend a quantity of Capsule contents, equivalent to 200 mg of rifabutin, in 20 mL of [methanol](#). Sonicate for 5 min, and pass through a suitable filter of 0.5-µm or finer pore size. Dilute a portion of the filtrate with [methanol](#) to obtain a solution containing 20 µg/mL of rifabutin.

**Acceptance criteria:** Meet the requirements

- **B.** The retention time of the major peak of the *Sample solution* corresponds to that of the *Standard solution*, as obtained in the Assay.

### ASSAY

#### • PROCEDURE

**Solution A:** 13.6 g/L of [monobasic potassium phosphate](#)

**Mobile phase:** [Acetonitrile](#) and *Solution A* (50:50). Adjust with [2 N sodium hydroxide TS](#) to a pH of 6.5 ± 0.1. Pass through a suitable filter of 0.5-µm or finer pore size.

**System suitability solution:** Dissolve 10 mg of Rifabutin in 2 mL of [methanol](#), add 1 mL of [2 N sodium hydroxide TS](#), and allow to stand for 4 min. Add 1 mL of [2 N hydrochloric acid TS](#), and dilute with *Mobile phase* to 50 mL. [NOTE—Portions of this solution may be stored in the frozen state for future use.]

**Standard solution:** 0.5 mg/mL of [USP Rifabutin RS](#) prepared as follows. Transfer an amount of [USP Rifabutin RS](#) to a suitable volumetric flask. Add [acetonitrile](#) to fill 10% of the volume of the flask, and dilute with *Mobile phase* to volume.

**Sample solution:** Nominally 0.5 mg/mL of rifabutin prepared as follows. Remove the contents of NLT 20 Capsules, weigh, and determine the average weight of the Capsule contents. Transfer a portion of the powder, equivalent to 25 mg of rifabutin, to a 50-mL volumetric flask, add 5 mL of [acetonitrile](#), and dilute with *Mobile phase* to volume. Pass through a suitable filter of 0.5-µm or finer pore size.

#### Chromatographic system

(See [Chromatography](#) (621), [System Suitability](#).)

**Mode:** LC

**Detector:** UV 254 nm

**Column:** 4.6-mm × 12.5-cm; 5-µm packing [L7](#)

**Flow rate:** 1 mL/min

**Injection volume:** 10 µL

**Run time:** NLT 2 times the retention time of the rifabutin peak









