

Molnupiravir Analyzed with an Inverse Gradient in HPLC - AppNote

Oral Anti-Viral Medication - Aqueous Normal Phase Method

Molnupiravir can be analyzed using this simple “inverse gradient” HPLC Method shown below. This is offered as an orthogonal approach for a Reversed Phased Method and will show various polar impurities not detected by Reversed Phase HPLC.



Peak:

Molnupiravir



Method Conditions:

Column: Cogent Diamond Hydride™, 4μm, 100Å

Dimensions: 4.6 x 75mm

Mobile Phase: (95:5) Acetonitrile / DI Water with 0.1% Formic Acid

Injection Volume: 1μL

Flow Rate: 1.0mL / minute

Detection: UV @ 254nm

Sample Preparation: Molnupiravir is dissolved at a concentration of 0.5mg / mL in (50:50) DI Water / Acetonitrile

Note: Molnupiravir is an oral antiviral drug that was developed for the treatment of influenza. It is a prodrug of the synthetic nucleoside derivative N4-hydroxycytidine, and exerts its antiviral action through introduction of copying errors during viral RNA replication.