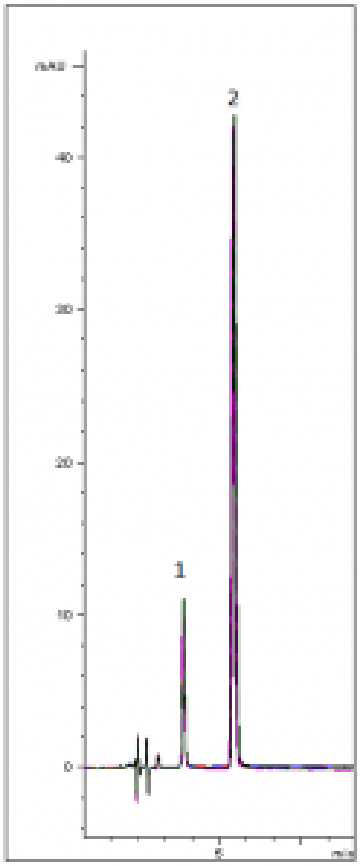
Molnupiravir and Favipiravir Analyzed with HPLC – AppNote

Oral Anti-Viral Medications – Easy Reversed Phase Method

Molnupiravir and Favipiravir, new anti-viral drugs were analyzed by HPLC using a simple Mobile Phase. As shown in the 10 injection overlay in the chromatogram below, the Separation, Peak Shapes and Repeatability are very good *(%RSD ≤ 0.2)*.



Peaks:

1. Favipiravir
2. Molnupiravir

Method Conditions:

Column: Cogent RP C18™, 5µm, 100Å

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Catalog No.: 68518-15P

Dimensions: 4.6 x 150mm

Mobile Phase: (75:25) DI Water / Acetonitrile with 0.1% Formic Acid

Injection Volume: 1µL

Flow Rate: 1.0mL / minute

Detection: UV @ 254nm

Sample Preparation: Molnupiravir and Favipiravir are 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. Favipiravir is effective against a wide range of types and subtypes of influenza viruses, including strains resistant to existing anti-influenza drugs. Of note is that favipiravir shows anti-viral activities against other RNA viruses such as arenaviruses, bunyaviruses and filoviruses, all of which are known to cause fatal hemorrhagic fever.*

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