

Reference Virus Panels for Antiviral Susceptibility Surveillance

Overview

The reference virus panels are designed to assist laboratories in evaluating antiviral resistance among circulating influenza viruses. Reference virus panels are available from the following WHO Collaborating Centres (WHO CC):

1. WHO CC – Atlanta (CDC):

The International Reagent Resource (IRR), established by the United States of America (USA) Centers for Disease Control and Prevention (CDC), supports antiviral susceptibility surveillance activities by providing two specialized reference panels to the Global Influenza Surveillance and Response System (GISRS) laboratories.

Available Reference Panels

The two panels available through IRR are the CDC Neuraminidase Inhibitor Susceptibility Reference Virus Panel ([FR-1755](#)) and the CDC Baloxavir Susceptibility Reference Virus Panel ([FR-1678](#)). Each panel contains seasonal influenza viruses selected as reference viruses to ensure a broad range of IC_{50}/EC_{50} values in laboratory assays.

Access and Distribution

In order to obtain these reference virus panels, organizations must [register](#) at IRR and have approval to handle biosafety level 2 infectious materials. Laboratories are permitted to request up to two panels each year. Once CDC approval is granted, the panels are shipped on dry ice at no cost to the recipient, with the exception of any customs duties and taxes that may apply to the shipment.

2. WHO CC – Tokyo (NIID):

Available Reference Panel

The reference virus panel contains two influenza A(H3N2) viruses selected to represent baloxavir-susceptible (PA-I38) and baloxavir-reduced susceptibility (PA-I38T) phenotypes, enabling comparison of antiviral susceptibility in laboratory assays.

Access and Distribution

To request the reference virus panel, contact NIID by email. Once the request is approved by NIID, the panel will be shipped on dry ice and provided free of charge to National Influenza Centres (NICs). Details of the request procedure are available on this [website](#).