

FOI 23/722

Dear

Thank you for your email correspondence with our FOI team on 30 September 2023, where you submitted an FOI request for the following:

"Under the Freedom of information

Can you please give the following re Pcr testing?

1 The primer sequence to detect Sars Cov2 virus.

2 The primer sequence to detect Influenza A

3 The primer sequence to detect Influenza B

4 The primer sequence to detect Rhinovirus.

5 The primer sequence to detect Adenovirus.

The MHRA may hold some of the information requested. However, there are numerous PCR tests available for the diagnosis of these viral pathogens. These tests use different primers and probes that target different regions of the viral genome and vary depending on the manufacturer. As you have not stated which specific PCR tests you are interested in, we cannot determine whether we hold details of the primer sequences.

The Freedom of Information Act places a general duty on public authorities to provide access to official information. However, in accordance with section 43(2) of the Freedom of Information Act ([Section 43 - Commercial interests | ICO](#)), sequences used in manufacturer PCR tests are proprietary and therefore the information requested may be exempt from disclosure;

For your information, we provide a list of target regions within the viral genome of the viral pathogens requested that may be targeted by commercially available PCR tests.

1. SARS- COV-2- Open reading frame (ORF1ab), Nucleocapsid (N) and RNA-polymerase (RdRP) envelope (E), spike protein (S), and RNA-dependent are often targeted by commercially available SARS-CoV-2 PCR tests. A list of COVID-19 test validation-approved products is available here: [[Global Influenza Programme \(who.int\)](http://COVID-19%20test%20validation%20approved%20products%20-%20GOV.UK%20(www.gov.uk)]COVID-19 test validation approved products - GOV.UK (www.gov.uk)2. Influenza A- Influenza A matrix gene (M gene) and haemagglutinin gene specific for influenza A subtypes are often targeted by commercially available influenza A PCR tests. More information is available here; <a href=)
3. Influenza B- Influenza B matrix gene (M gene) or Nucleoprotein (NP) or Non-structural (NS) genes and haemagglutinin gene specific for influenza B virus are often targeted by commercially available influenza B PCR tests. More information is available here; [Global Influenza Programme \(who. int\)](#)
4. Rhinovirus- The 5' noncoding region (5' untranslated region (UTR)) of the rhinovirus genome is most targeted in PCR assays. More information is available here: [Rhinovirus detection using different PCR-based strategies - PMC \(nih.gov\)](#)

5. Adenovirus- PCR assay targets the variable regions of the three major capsid genes, i.e., hexon, penton base, and fiber genes, that span the adenovirus genome. More information is available here: [A retrospective performance evaluation of an adenovirus real-time PCR assay - Alsaleh - 2014 - Journal of Medical Virology - Wiley Online Library](#)

Please note that the above information is publicly available and can be accessed via the links provided.

If you are dissatisfied with the handling of your request, you have the right to ask for an internal review. Internal review requests should be submitted within two months of the date you receive this response and addressed to: [MHRA request email]

Please remember to quote the reference number above in any future communications.

If you were to remain dissatisfied with the outcome of the internal review, you would have the right to apply directly to the Information Commissioner for a decision. Please bear in mind that the Information Commissioner will not normally review our handling of your request unless you have first contacted us to conduct an internal review. The Information Commissioner can be contacted at:

The Information Commissioner's Office
Wycliffe House
Water Lane
Wilmslow
Cheshire
SK9 5AF

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Kind regards,

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