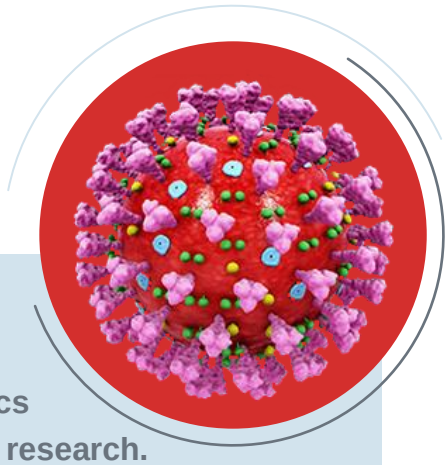
Complete Genomics solutions for SARS-CoV-2 applications



Understanding SARS-CoV-2 and patients genetic variability as well as virus impact on host are key to develop treatments and vaccines to fight the outbreak. That's why Eurofins Genomics gather genomics solutions for a unique market offering to support and facilitate your research. This offer was designed for pharma, biotech and academic applications from target identification, to target validation, pre-clinical studies and up to phases I-II-III as well as epidemiology studies. Our scientific experts support the entire value chain of your trials though a broad range of up to date technologies and innovations.

Solution 1 Identify genetic susceptibility towards infection

Correlate the genetic background and subsequent progression of SARS CoV-2.

Service: We offer a broad variety of highly flexible genotyping solutions addressing all your needs from array-based genotyping from Thermo Fisher Scientific (Axiom™ SARS-CoV-2-Research Array, Axiom™ Precision Medicine Research Array, Axiom™ Precision Medicine Diversity Research Array), or Illumina Inc (Infinium™ Global Screening Array) of large cohorts to customized genotyping panels. We also offer a vast area of expertise in NGS sequencing of whole genomic regions in patient samples to identify new single nucleotide polymorphisms with physiological implications.

Solution 2 Assess the changes in host gene expression induced by virus infection

Link expression profiles with specific resistance or susceptibility in each patient to the virus.

Service: Benefit from multiple gene expression platforms such RNA-Seq, Clariom™ S or Clariom™ GO Screen and choose your favorite technology to generate datasets according to your study design. Additional bioinformatics services are available for mapping, differential gene expression, splicing, group comparison…

Solution 3 Identify potential drug mode of action

Characterize the virus-inducible host transcriptome pathways and identify novel virus-inducible RNAs.

Service: Benefit from multiple gene expression platforms such RNA-Seq, Clariom S or Clariom GO Screen and choose your favorite technology to generate datasets according to your study design. Additional bioinformatics service available for mapping, differential genes expression, group comparison…

Did you know we can also run the cells drug compound screening though Eurofins PanLabs? We have experience with 305+ cell lines and 20 primary cell types.

Solution 4 Identify viral variants

We support real-time genomic infectious disease epidemiology by sequencing patients collected virus to study SARS-CoV-2 genetic variability across populations, geographies, and time or track antigen evolution for vaccine development. Analysis is also directly available for each positively tested specimen.

Service: Optimized RNA-sequencing of the complete viral ssRNA genome on NovaSeq from swabs or any other source. Guaranteed number of reads and processing of any number of samples, starting with one sample. Additional bioinformatics services are available for mapping on SARS-CoV-2 reference genome; SNP table, alignment-based consensus virus genome sequence generation.

Solution 5 Track the infection status of your study cohort

With our validated SARS-CoV-2 diagnostic tests, performed by our clinical diagnostics division, you can get reliable results within 24h and decide to include patients in your trial or monitor infection level after drug or vaccine treatment.

Services:

- RT-PCR test based on the extraction of SARS-CoV-2 virus nucleic acid from specimens, followed by combined reverse transcription of viral RNA and PCR amplification using real-time reverse transcriptase PCR (RT-PCR) methods. An internal control is added to ensure that extraction was performed correctly and that the RT-PCR reaction was not inhibited.
- Antibody testing for coronavirus (COVID-19) SARS-CoV-2 by IgG and IgM panel blood-based serology testing. This will help to identify people who have been exposed to SARS-CoV-2 and may have developed some level of immunity, but potentially had only mild to no symptoms and, therefore, were not diagnosed with COVID-19. The test can be used to evaluate what percentage of the population has been exposed to SARS-CoV-2.

Extra: For your wet lab we also provide:

- Eurofins Genomics can provide the primer and probe sequences recommended by the CDC and the WHO to researchers working on the coronavirus.
- Eurofins Genomics provides ready to use control plasmids, with one or more SARS-CoV-2 gene sequences, for your research with the 2019-nCoV.
- Adventitious tests
- CMO for intermediate product used in vaccine or drug production

Contact us today: projectsales-eu@eurofins.com

A dedicated expert will discuss your project

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