



MICROBIOME ANALYSIS

SGS is a world leader in providing state of the art analytical services. Our revamped microbiome analytical service provides you an in-depth look into the microbial world. With our Next Generation Sequencing (NGS) metagenomic workflows coupled to bespoke sample extractions and strong bio-informatics capabilities you get the insights you need. Our services cover almost any sample type and our reports provide addition metrics and insights.

VERSATILE	UNTARGETTED	INDEPTH INSIGHTS
Analyse microbial DNA from various sample types and environments.	Remove bias by running a full scan to detect all microbes present.	Count on our various reporting options to get the most of the NGS data.

WHAT IS METAGENOMICS?

Metagenomics is the study of the genetic material (genomes) from a mixed community of organisms. It is usually done by a technique called metabarcoding that looks at variations in specific DNA sequences to identify different species in a sample.

WHAT IS NGS?

NGS is a technique which allows for in depth sequencing of numerous small fragments of DNA in parallel. Due to this parallel approach, the automatic detection of the nucleotides and the possibility of computers to process and reorganize large amounts of data, NGS has become the fastest and most cost effective method for sequencing DNA. With this technology SGS can detect all microbial species or taxonomic groups in virtually any sample type.

BENEFITS OF MICROBIOME ANALYSIS BY SGS:

- SGS can handle various sample types and tailored DNA extraction protocols.
- Multiple quality control steps ensure we make the most out of any sample and allows us to utilize data quality in our end reports and we offer ISO certified workflows.
- Our metabarcoding services can target various regions of 16S rRNA to evaluate microbiomes. But we also support other gene targets like ITS, COI, etc.
- Various other sequencing workflows are available metabarcoding, shotgun, targeted gene sequencing & long-range PCR.
- Bespoke bioinformatics pipelines, statistical outputs and indexes and linked to our proprietary microbial traits (MiRAS) database.
- Targeted quantification through various methods, ranging from RT-qPCR, ddPCR, enzymatic and culture method.
- Advisory services for sampling or execution of sample programs; plus integrated projects.
- Global network of field sampling teams can support sample acquisition from various environments; like deep marine sediment to indoor surface swabs.
- Technical expertise and consultancy is provided by SGS experts from the Global Biosciences Center & MiRAS teams.



INDEPENDANT



INNOVATION



EXCELLENCE



GLOBAL NETWORK

Microbiome analysis is supported by:

- SGS Global Biosciences Center (GBC)
- SGS Competence Center for Molecular Biology (CCMB)
- SGS MiRAS

CONTACT US:

<u>GBC@SGS.COM</u>

GBC WEBSITE

WWW.SGS.COM

