

Shotgun Metagenomic Sequencing

Introduction

In shotgun metagenomic sequencing, genomes from environmental samples are analyzed without the prior isolation and cultivation of individual species; therefore, it is a powerful technique for studying microbial communities in their natural habitat, with a broad range of applications. At Novogene, our customers can rely on our expertise in Next Generation Sequencing (NGS) to help them explore the rich genetic repertoire of microbial communities, while also benefiting from our bioinformatics expertise to help identify the species, genes, and pathways represented in their samples. Novogene provides shotgun metagenomic sequencing service with an Illumina Novaseq platform and an assembly-first strategy. Additionally, our bioinformatics analyses provide gene predictions, functional annotations, and taxonomic annotations. Our standard analysis package includes mPATH, heatmaps, PCA, cluster analysis, and other programs, generating high-quality, publication-ready data.

Advantages & Highlights



Highly experienced

We have completed over 400 metagenomic sequencing projects for our customers and have published multiple metagenomic papers.



Outstanding service

We provide high-quality sequencing, an efficient standard workflow, and bioinformatics analyses at cost-effective prices.



Effective methodology

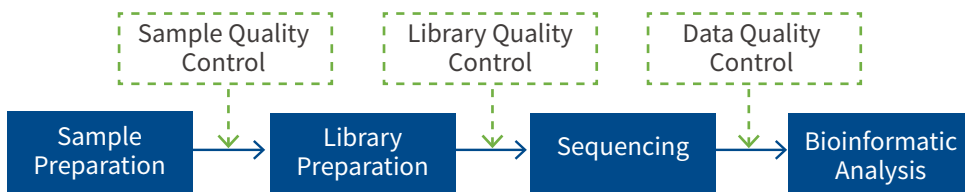
350bp insert DNA library, Illumina platform, paired-end 150bp. For each sample, 6Gb and 12Gb packages are available, with Q30 \geq 80%.



Other independents

Expert bioinformatics analyses with three databases (KEGG, eggNOG, and CAZy) provides comprehensive data on annotated genes and metabolic pathways.

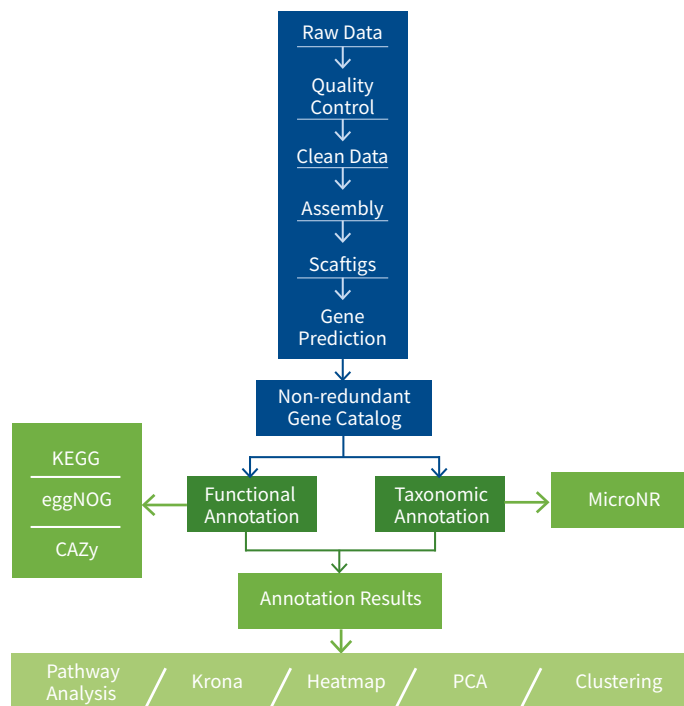
Project Workflow



Sample Requirements

Sample Type	Amount	Concentration	Volume	Purity
Genomic DNA	\geq 200ng	\geq 10ng/ μ L	\geq 20 μ l	OD 260/280=1.8-2.0, no degradation or RNA contamination

Analysis Pipeline



Novogene Powered Publications

Year	Journal	Title
2020	<i>Gut Microbes</i>	Effects of spaceflight on the composition and function of the human gut microbiota
2018	<i>Microbiome</i>	The chemodiversity of paddy soil dissolved organic matter correlates with microbial community at continental scales
2018	<i>Nature Communications</i>	Hypoxia induces senescence of bone marrow mesenchymal stem cells via altered gut microbiota
2018	<i>Nature ISME</i>	Age-associated microbiome shows the giant panda lives on hemicelluloses, not on cellulose

For Research Use Only. Exclusive for Clients in North and South America.



Follow us on LinkedIn

Novogene Corporation Inc.

8801 Folsom Blvd #290, Sacramento, CA 95826
 916-252-0068-383 inquiry_us@novogene.com en.novogene.com

Copyright©2011-2021 Novogene Corporation.
 All Rights Reserved. Information and specifications are subject to change at any time without notice.