dante labs

DANTE LABS™ TEST RESULTS

KIT ID: SAMPLE

Multiple Myeloma Report

Introduction

The Multiple myeloma test is based on Whole Genome Sequencing Test. As such, it analyzes all Common and Rare Variants associated with Multiple myeloma instead of a limited set of genes. Multiple myeloma is a tumor that forms in a type of white blood cells called plasma cells that help fight pathogens by producing antibodies. Multiple myeloma causes cancer cells to accumulate in the bone marrow and rather than produce helpful antibodies, the cancer cells produce abnormal proteins that can cause complications. When signs and symptoms do occur, they can include, bone pain, especially in your spine or chest, Nausea, Constipation, Loss of appetite, Frequent infections, Weight loss, Weakness or numbness in your legs, Excessive thirst. Myeloma begins with one abnormal plasma cell in your bone marrow . The abnormal cell multiplies rapidly. Because cancer cells don't mature and then die as normal cells do, they accumulate, eventually overwhelming the production of healthy cells.

In our analysis, we did not find any pathogenic variants.

Genes/Locations included in report:

MAF (0)	BRAF (1)	IRF4 (0)	LIG4 (0)	CCND1 (0)	FCRL4 (0)	FGFR3 (0)
PWWP3A (0)						

Variants Found:

Gene/Loc	Chr: Pos	RSID	Phenotype Name	Zygosity	Variant	Allele Frequency	Significance	Review Status
BRAF	7:140434597	rs60814637	Noonan syndrome	HOM	G>GA		uncertain significance	★

In our analysis, we did not find any related conditions

Methods

Extraction

Before sequencing, DNA extraction and library preparation processes were carried-out by automated liquid handling robots. Sequencing was completed using the NovaSeq 6000 instrument (Illumina).

The Nextera DNA Flex (Illumina) library was used during sequencing.

Analysis

Primary and secondary analysis was performed on the Illumina DRAGEN platform. Our secondary analysis extends the GATK 'best practices' pipeline. This includes Variant Quality Score Recalibration

It is important to note that applying a filter will not remove any data from the VCF file; it will just annotate the "FILTER" column. Variants with the "PASS" annotation are considered high quality and may, therefore, be used for advanced downstream analysis.

Sequence data is primarily aligned to the GATK GRCh37 reference genome and mitochondria is aligned to the Revised Cambridge Reference Sequence (NC_012920.1). Additional references may have been requested though tertiary analysis is not conducted on variant calls using references other than GRCh37.

Limitations

Test results are not interpretations. All variants reported in the genes included in the panel are reported.

Rare polymorphisms may lead to false-negative or false-positive results.

Due to limited read length and other contributing technical limitations, repeat expansions (e.g. in the Huntington gene, the SCA-genes, the myotonic dystrophy repeat region, and other similar regions) cannot be assessed with the applied method

Disclaimer

Any preparation and processing of a sample from saliva collection kit to Dante Labs by a customer is assumed to belong to the email used by the customer at the moment of kit registration on the Dante Labs Genome Manager platform before the shipment of the specimen to the laboratory.

The analysis and reporting conducted by Dante Labs are based on information from one or more published third-party scientific and medical studies.

Because of scientific and medical information changes over time, your risk assessment for one or more of the conditions contained within this report may also change over time. For example, opinions differ on the importance and relative weights given to genetic factors. Also, epidemiological data isn't available for some conditions, and this report may not be able to provide definitive information about the severity of a particular condition. We recommend asking your healthcare provider to correctly interpret them. Therefore, this report may not be 100% accurate (e.g., new research could mean different results) and may not predict actual results or outcomes.

This test has not been cleared or approved by the U.S. Food and Drug Administration (FDA). The US Food and Drug Administration (FDA) has determined that clearance or approval of this method is not necessary and thus neither have been obtained.

Contact

Please contact contact@dantelabs.com for more information on the contents of this report, our analysis methodology, and the limitations of this process.