



Report Date: 20/10/2022
 Barcode Number: JDlactose
 Reporting Scientist: John Smith



LACTOSE INTOLERANCE TEST REPORT

Client Information

Donor Name: John Doe
 Date of Birth: Sample Collection Date: 20/10/2022

Sample Type: A self-collected buccal swab sample was received from the individual named above; the sample was received in good condition, labelled with a unique barcode and was deemed suitable for the test. All data above has been provided by the customer.

Explanation of the test

A buccal swab sample was successfully self-collected from the individual named above and placed into a swab envelope which was returned to the laboratory for the purpose of conducting a lab-based real-time PCR (RT-PCR) genetic test for the predisposition to primary lactose intolerance. This genetic assay detects the presence of single nucleotide polymorphisms (SNPs) which are associated with primary lactose intolerance within the sample.

Results of the test

Based on DNA analysis, the tables below show the result of testing, an explanation of the results and the specific SNPs tested for that are associated with primary lactose intolerance, the genotype of the sample and the zygosity (two different copies = heterozygous, two of the same copy = homozygous).

Result
Likely to have primary lactose intolerance

Explanation
This sample is homozygous for one or both of the high-risk SNPs tested indicating that primary lactose intolerance is likely

Variant Name	Detected Genotype	Zygosity
C-13910T	C C	Homozygous
G-22018A	G G	Homozygous

1 Webster Court
 Carina Park
 Warrington
 United Kingdom
 WA5 8WD





AlphaBiolabs™

Understanding your result

The lactose intolerance DNA test determines the genotype of two SNPs within the *MCM6* gene that are associated with primary lactose intolerance (sometimes referred to as lactase non-persistence or LNP). The presence of lactose intolerance-related SNPs implies an increased risk for primary lactose intolerance, however it is not diagnostic of the illness. If your genotype is 'C C' at C-13910T and/or 'G G' at G-22018A then you are likely to have primary lactose intolerance. The following genotypes are not commonly linked to primary lactose intolerance: 'T T' and 'C T' at C-13910T and 'A A' and 'A G' at G-22018A.

What is lactose intolerance?

Lactose intolerance is a condition whereby the body does not have the ability to break down the sugar, called lactose, found in dairy products. This can cause unpleasant symptoms such as bloating, flatulence, stomach pain, nausea and diarrhoea.

Primary lactose intolerance describes the condition where the body produces little to no lactase, the enzyme which breaks down the sugar lactose. It is an inherited recessive genetic condition, which means you need two copies of the lactose intolerance alleles to have primary lactose intolerance, and it is passed down from one generation to the next.

Secondary lactose intolerance occurs when there has been illness or injury to the gut. This could be an infection, or a pre-existing illness, such as coeliac disease. Some people acquire secondary lactose intolerance after taking a course of antibiotics. In these people, its causes are not genetic, and so this test will not detect it. Secondary lactose intolerance may resolve itself, or be permanent.

Recommendations

This test cannot be used to diagnose an individual with primary lactose intolerance. If you are experiencing symptoms of lactose intolerance, you should consult your doctor, who may conduct further tests to confirm or rule out lactose intolerance. A low risk means you are highly unlikely to suffer from primary lactose intolerance, but it is possible to suffer from another form of lactose intolerance. Your doctor may also suggest eliminating lactose from your diet to see if your symptoms improve. You may also find it useful to keep a food diary to document your food intake and your subsequent symptoms.

1 Webster Court
Carina Park
Warrington
United Kingdom
WA5 8WD

