

ColoTect Testing Report

1. INFORMATION

Sample and Referring Information

Project Name:	Sentis ColoTect CRC Screening	Sample ID:	22S03353975
Sample Type:	Stool	Sample Collection Date:	20220221
Sample Received Date:	20220224	Sample Report Date:	20220225
Clinical/Hospital:	Zentya	Referring Doctor:	NA

Patient Information

Patient Name:	●●●●●●●●	Date of Birth:	19690201
Gender:	Female		
Clinical Symptoms and Disease History:	NA		
Family History:	NA		

2. RESULT

Low RISK

Interpretation and Suggestion

A low risk result indicated that the methylation level was detected as normal in this stool sample, the chance that a person with colorectal cancer (CRC) or an advanced adenoma is less.

It is recommended that you keep a healthy lifestyle and participate colorectal cancer screen regularly. If you have obvious colorectal symptoms already, please contact your doctor for further examinations.

TEST APPROVED BY

Laboratory Director, BGI

Date: 25. 2. 2022

3. COLOTECH DESCRIPTIVE INFORMATION**Method**

ColoTect is a non-invasive, highly sensitive screening test method for colorectal cancer (CRC) and precancerous lesions. Human DNA is extracted from self-collected stool sample and used for the multiplex methylation specific qPCR to detect the methylation level of CRC gene markers——SDC2, ADHFE1, and PPP2R5C.

SDC2: SDC2 encodes a kind of intracellular membrane protein, which has important biological functions in cell division and migration [1]. Multiple studies by comparing the patients with colorectal carcinoma tissues and adjacent tissues of methylation modify status, have discovered significant difference of SDC2 gene methylation in tissue adjacent to carcinoma tissues and an obvious decreasing detection rate in the cancer tissue, adenoma tissue, polyp tissues and normal tissues, so it can be used as an effective marker of colorectal cancer detection [2-3].

ADHFE1: ADHFE1 encodes a transhydrogenase, and the abnormal regulation caused by hypermethylation of this gene can shorten the cell cycle of colorectal cancer and promote the proliferation of cancer cells [4]. Compared with the normal tissue of large intestine, ADHFE1 gene showed high methylation level in both cancer tissues and advanced adenoma tissues [5]. Its methylation level is significantly different in normal tissues, colorectal cancer tissues and adenoma tissues, which is an ideal marker for colorectal cancer detection [6,7].

PPP2R5C: PPP2R5C encodes a regulatory subunit of PP2A phosphatase and is a negative regulator of cell growth and proliferation [8]. There is evidence that its encoding protein can regulate the dephosphorylation of p53 protein in response to DNA damage, thus inhibiting the growth of colorectal

cancer cells [9]. Hypermethylation of PPP2R5C gene is closely related to the occurrence and development of colorectal cancer and can be used as a potential marker for colorectal cancer detection [10].

Limitations and Declaration

This report is specific to the tested sample. The false positive result and false negative result may present, due to individual differences among subjects and technical limitations. The test result is for clinical reference and cannot be used as the evidence for clinical diagnosis. If you have any doubt about the results, please contact us by email info@bgi.com within 7 days after receiving the report.

Reference

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