



Backed by strong science and robust clinical research in collaboration with Mayo Clinic, Cologuard® is a stool DNA-based colorectal cancer screening test for average-risk individuals who are 45 or older. Cologuard uses a biomarker panel which analyzes a person's stool sample for 10 DNA markers, as well as blood in the stool (hemoglobin). This multi-marker approach is a distinguishing feature of Exact Sciences' scientific platform.

Cologuard finds colon cancer even in early stages when it is more treatable.^{1,2*}

Cologuard is convenient. It's a noninvasive screening option that can be used at home that requires no special prep, no need for time off, no changes to your diet or medication. People can collect their Cologuard sample in the privacy of their own home. Cologuard includes a built-in patient navigation program with 24/7 patient support for questions and reminder texts and calls to support completion of the test.



→ VISIT COLOGUARD.COM

INNOVATION SUPPORTS THE COLOGUARD SCIENTIFIC PLATFORM



STOOL DNA ISOLATION



DNA STABILITY TECHNOLOGY



DNA BIOMARKER DETECTION



HEMOGLOBIN BIOMARKER
DETECTION AND STABILITY
TECHNOLOGY



POWERFUL MATHEMATICAL
ALGORITHM



STOOL DNA ISOLATION

This proprietary technology proved to be a breakthrough in the development of the multitarget stool DNA test. Our scientists needed to first solve the essential problem of effectively isolating DNA from stool before achieving the goal of developing a noninvasive colon cancer screening test.





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*Based on 5-year relative survival

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The development of an enhanced DNA stabilizing buffer was a critical step in the process of creating a reliable at-home screening kit. With this advance, the DNA in stool samples is protected through the transport process and remains amenable to analysis once it arrives at our processing center.



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DNA BIOMARKER DETECTION

We developed our proprietary QuARTS technology (Quantitative Allele-specific Real-time Target and Signal Amplification) which efficiently amplifies and quantifies two separate methylated DNA markers (NDRG4 and BMP3) along with seven distinct KRAS gene point mutations. The beta actin (ACTB) gene serves as a reference marker for quantitation of the total amount of human DNA in each sample.



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We improved upon the technology for the ELISA-based detection of a protein biomarker (hemoglobin) through an additive in the stabilization buffer. This innovation allows for longer transit time from sample collection to processing by the lab.



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The final step in the multitarget stool DNA test incorporates the quantitative results from the DNA alterations combined with the protein biomarker detection to determine a positive or negative result. This algorithm is the vital workhorse that translates our invisible biology into actionable information.

