



# Highly Sensitive Mutation Profiling Solutions for Colon Cancer

Processing samples and reporting results can take longer than two weeks due to sample batching limitations and intensive data analysis pipelines. The MassARRAY® System can generate results in a single day, with a laboratory-friendly workflow and easy-to-analyze mutation reports.

Confirm mutations across heterogeneous tumor samples, circulating cell-free DNA, or circulating tumor cells using highly sensitive panels developed for use on the MassARRAY System. The iPLEX® HS Colon Panel enables mutation detection in solid tissue samples as low as 1% allele frequency. The UltraSEEK™ Colon Panel enables mutation detection in liquid biopsy samples as low as 0.1% allele frequency. These targeted panels profile the most frequently referenced driver mutations in colorectal cancer, minimizing the challenge of intensive data analysis.

- ✓ Rapidly analyze data and generate results in a single day
- ✓ Identify mutations across *KRAS*, *NRAS*, *BRAF*, *EGFR*, and *PIK3CA* genes
- ✓ Utilize as little as 10 ng of input DNA

For Research Use Only. Not for use in diagnostic procedures.

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51-20100R2.0 0317

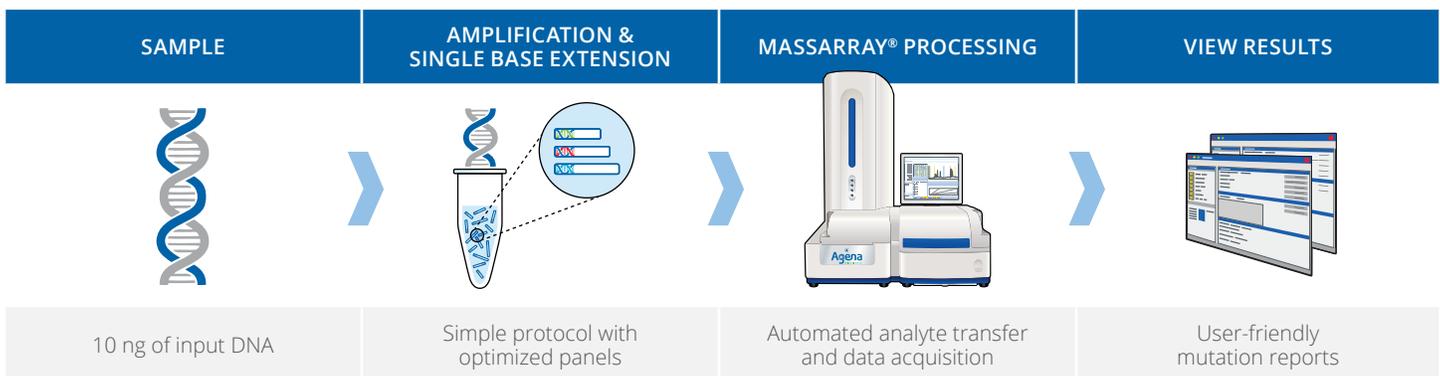
## GENES AND MUTATIONS

Pre-designed panels across 5 genes for comprehensive profiling of colon cancer.

GENE	COVERAGE	# OF MUTATIONS*	
		iPLEX® HS COLON PANEL	ULTRASEEK™ COLON PANEL
<b>BRAF</b>	Codon 469 of exon 11; codons 594, 600 of exon 15	3	5
<b>EGFR</b>	Extracellular domain mutations across exon 12	2	10
<b>KRAS</b>	Codons 12, 13 of exon 2; codons 59, 61 of exon 3; codons 117, 146 of exon 4	47	48
<b>NRAS</b>	Codons 12, 13 of exon 2; codons 59, 61 of exon 3; codons 117, 146 of exon 4	30	40
<b>PIK3CA</b>	Codons 542, 545 of exon 9; codon 1047 of exon 20	4	4

\* Complete mutation list available upon request

## WORKFLOW



DNA to data in ~8 hours with less than 30 minutes of manual processing time enables greater lab efficiency. Simplified reporting with automated software generates clear results.

## ORDERING INFORMATION

ITEM	CATALOG NO	SAMPLES/KIT
iPLEX® HS Colon Panel*	17940	120
UltraSEEK™ Colon Panel <sup>+</sup>	17942	80

\* Requires additional iPLEX Pro reagents; + Requires additional UltraSEEK reagents

Contact your local Agena Bioscience representative for more information.

## REFERENCES

- Vnencak-Jones, C., M. Berger, W. Pao. 2016. Types of Molecular Tumor Testing. *My Cancer Genome* <https://www.mycancergenome.org/content/molecular-medicine/types-of-molecular-tumor-testing/>
- R.T. Birse, D. Irwin. Reliable Detection of Low Abundance Somatic Mutations of *EGFR*, *KRAS*, *BRAF*, *NRAS* and *PIK3CA* in Metastatic Colorectal Adenocarcinomas Using iPLEX HS, a New Highly Sensitive Assay for MassARRAY. Poster session presented at: Association for Molecular Pathology Annual Meeting; 2016 Nov 10-12; Charlotte, NC.
- Mosko, Michael J., et al. "Ultrasensitive Detection of Multiplexed Somatic Mutations Using MALDI-TOF Mass Spectrometry." *The Journal of Molecular Diagnostics* 18.1 (2016): 23-31.