

Lung Cancer Panels

From Assays by Agena



Overcome Challenges in Mutation Profiling of Lung Cancer Samples

Mutation profiling of non-small cell lung carcinoma (NSCLC) samples can be difficult due to limited sample quantity and poor sample quality. On average, approximately 20% of samples are rejected due to low DNA concentration, quality, and tumor percentage.^{1,2} You can decrease the number of rejected samples, reduce workflow failure rate, and minimize sample retesting using optimized panels developed for use on the MassARRAY® System.

The Assays by Agena (AbA) iPLEX® HS Lung Panel facilitates mutation detection as low as 1% allele frequency from poor quality and degraded samples such as FFPE tissue, FNA, and cytology blocks.

The highly sensitive AbA UltraSEEK™ Lung Panel enables disease progression and resistance monitoring from circulating tumor cells (CTCs) and circulating tumor DNA (ctDNA), detecting mutations as low as 0.1% allele frequency.

- ✓ Utilize as little as 10 ng of input DNA
- ✓ Identify mutations across *BRAF*, *EGFR*, *ERBB2*, *KRAS*, and *PIK3CA* genes
- ✓ Achieve reliable results in as fast as one day, using any sample type

With a robust, PCR-based workflow and easy to analyze mutation reports, these targeted panels generate results relevant to your lung cancer research.

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

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Agena
BIOSCIENCE

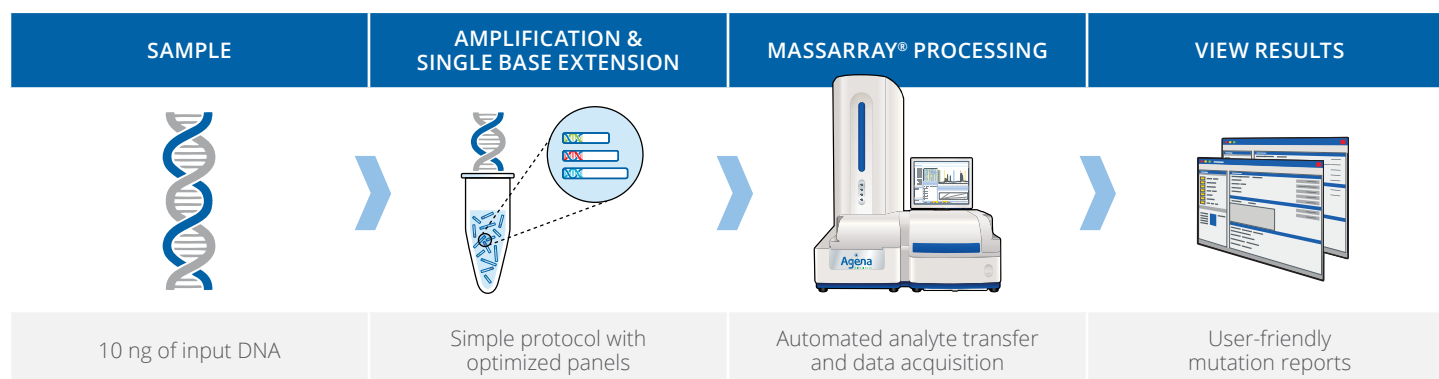
GENES AND MUTATIONS

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

GENE	COVERAGE	# OF MUTATIONS*	
		iPLEX® HS LUNG PANEL	ULTRASEEK™ LUNG PANEL
BRAF	Codon 469 of exon 11; codons 594, 600 of exon 15	4	4
EGFR	Exon 19 indels, exon 20 insertions, and substitutions across exons 18, 19, 20, and 21	46	43
ERBB2	Exon 20 insertions	2	2
KRAS	Codons 12, 13 of exon 2; codon 61 of exon 3	14	14
PIK3CA	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
AbA iPLEX® HS Lung Panel *	17941	120
AbA UltraSEEK™ Lung Panel +	17943	80

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

Contact your local Agena Bioscience representative for more information.

REFERENCES

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- Raney, J. A., et al. "Lessons Learned in the Clinical Lab: Factors Affecting Successful Library Construction of FFPE Samples for Somatic Mutation Detection." Poster session presented at: Association for Molecular Pathology Annual Meeting; 2016 Nov 10-12; Charlotte, NC.
- R.T. Birse, D. Irwin. Assessment of Common Somatic Mutations of EGFR, KRAS, BRAF, NRAS and PIK3CA in Pulmonary Adenocarcinoma 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.