



OncoFOCUS™ Panel v3

From Assays by Agena

Identify Actionable Somatic Mutations in Solid Tumors

- ✓ Increase laboratory efficiency with a focused, actionable multi-gene panel
- ✓ Achieve robust results with $\geq 5\%$ mutant allele frequency
- ✓ Reduce turnaround time, generating results in as fast as a day
- ✓ Utilize as little as 20 ng of input DNA

Current technologies for solid tumor profiling either test only a handful of mutations from individual genes, or require lengthy laboratory workflows and complex bioinformatics to detect mutations across multiple genes.^{1,2}

Agena Bioscience offers the OncoFOCUS™ Panel v3, a comprehensive solution for profiling over 200 actionable mutations with a simple 8-hour workflow. The analytically validated assays identify essential somatic mutations in *BRAF*, *EGFR*, *KIT*, *KRAS*, and *NRAS* genes, which are implicated in various cancers. Identifying positive mutations present in the samples is fast, with simple and user-friendly reports.



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

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ONCOFOCUS PANEL V3: GENES AND MUTATIONS

Generate high quality data using pre-designed and pre-verified assays that provide actionable results.

GENE	COVERAGE	# OF MUTATIONS
<i>BRAF</i>	Substitutions and deletions in codon 469 of exon 11; codons 594, 597, 600, 601 of exon 15	25
<i>EGFR</i>	Substitutions, insertions, and deletions across exons 18, 19, 20, and 21. Includes key mutations such as L858R, L861Q, and T790M	125
<i>KIT</i>	Substitution mutations in exons 11, 13, and 17	6
<i>KRAS</i>	Substitution mutations across codons 12, 13 of exon 2; codons 59, 61 of exon 3; codons 117, 146 of exon 4	43
<i>NRAS</i>	Substitution mutations across codons 12, 13 of exon 2; codons 59, 61 of exon 3; codons 117, 146 of exon 4	31

THE MASSARRAY WORKFLOW

The OncoFOCUS Panel v3 employs two multiplexed PCR reactions, requiring only 20 ng of input DNA per sample. Amplification is followed by the iPLEX® Pro single base extension reaction. The extension products are dispensed onto a SpectroCHIP® Array and detected via MALDI-TOF mass spectrometry on the MassARRAY System. After the sample run, the OncoMutation Report provides the list of positive mutations identified in the samples, facilitating quick analysis. The entire workflow, from DNA to results, can be completed in a single 8-hour day, with less than 30 minutes of hands on time.

THROUGHPUT

The OncoFOCUS Panel v3 contains multiplexed extension reactions comprised of 12 wells. The panel can be run in 96-well format (8 samples per plate), or 384-well format (32 samples per plate). Up to 256 samples can be processed per day, providing flexibility in sample throughput and batching requirements.

ORDERING INFORMATION

CATALOG NO	FORMAT	SAMPLES/KIT
Complete iPLEX® Pro Reagent Sets		
10217	10 x 384	320
10219	2 x 384	64
10160	10 x 96	80
10303	2 x 96	16
OncoFOCUS™ Panel v3 Primer Set		
17936	10 x 96	80

REFERENCES

1. Kriegsmann, Mark, et al. "Detection of *KRAS*, *NRAS* and *BRAF* by mass spectrometry-a sensitive, reliable, fast and cost-effective technique." *Diagnostic pathology* 10.1 (2015)
2. Giannini, Riccardo, et al. "*EGFR* and *KRAS* mutational analysis in a large series of Italian non-small cell lung cancer patients: 2,387 cases from a single center." *Oncology Reports* 36.2 (2016): 1166-1172.

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