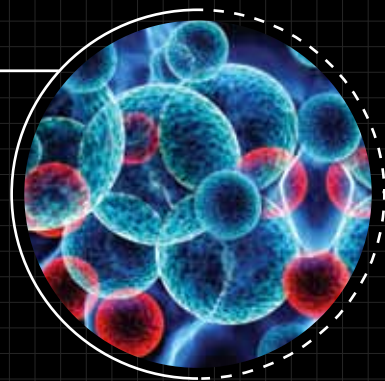


# THE SCIENCE OF

BALANCING POWER WITH FLEXIBILITY



A rapid and highly discriminatory tool




MassARRAY® System



## SCREEN, IDENTIFY OR CONFIRM KEY ONCOGENES

Screen and confirm high relevance somatic mutations in *EGFR*, *KRAS*, *NRAS*, and *BRAF* with solid tumor samples as low as 5% frequency.

Agena Bioscience's OncoFOCUS™ Panel v1.0 is a set of pre-validated assays covering 300+ somatic mutations in 4 key oncogenes observed in lung, colorectal, and metastatic melanoma tumors, for use on the MassARRAY® System. The panel provides a rapid and highly discriminatory tool to aid translational and clinical research studies, with extensive coverage to detect and differentiate key insertions and deletions in *EGFR*.

-  Efficiently screen for key oncogenes with as little as 20 ng input DNA.
-  Identify specific nucleic acid changes that may not have been detected with other methods, such as next generation sequencing or melting curve analysis.
-  Confirm mutation status for variants such as *BRAF* V600E obtained from other molecular methods.

The OncoFOCUS Panel is designed within two multiplexed PCR reactions requiring 20 ng input DNA, followed by 12 extension reactions. Only non-synonymous coding mutations previously reported to occur in human tumor samples were selected.



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

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51-20043R3.0 0415



## THE MASSARRAY WORKFLOW

The OncoFOCUS Panel v1.0 uses two multiplexed PCR reactions requiring 20 ng input DNA, followed by iPLEX® Pro single base extension reactions. The extension products are dispensed onto a SpectroCHIP® Array and detected via MassARRAY MALDI-TOF mass spectrometry. After the sample run, a new HTML-based OncoFOCUS report tool offers a Summary View, Mutation View, Sample View, and Sample-Mutation View to facilitate quick analysis.





## THROUGHPUT

The OncoFOCUS Panel contains multiplexed assays in 12 wells. The panel can be run in 24-well format (2 samples per plate), 96-well format (8 samples per plate), or 384-well format (32 samples per plate). Two to 256 samples can be processed per day, providing flexibility in sample throughput and batching requirements.

## ORDERING INFORMATION

CAT NO	FORMAT	SAMPLES/KIT
26600	2 x 384	64
26601	10 x 96	80
26602	2 x 96	16
26008	8 x 24	16

## ONCOFOCUS PANEL COMPONENTS

<b>AMPLIFY</b>		PCR Enzyme PCR Accessory Set OncoFOCUS PCR Primers
<b>EXTEND</b>		iPLEX Pro Reagent Set OncoFOCUS Extend Primers
<b>DETECT</b>		SpectroCHIP Array and Clean Resin (2 x 384, 10 x 96, 2 x 96)
<b>ANALYZE</b>		OncoFOCUS HTML Report Tool (Typer)

## ONCOFOCUS PANEL V1.0 GENES AND MUTATIONS

GENE	MUTATION
<b>BRAF</b>	G469S, G469A, G469E, G469R, G469V, D594G, D594V, L597S, L597Q, L597V, L597R, T599_V600insT, T599_V600insTT, V600G, V600K, V600R, V600L, V600M, V600E, V600>YM
<b>EGFR</b>	R108K, T263P, A289V, A289D, G598V, E709V, E709H, E709K, E709G, E709Q, E709A, G719S, G719D, G719C, G719A, K745_E749delKELRE, E746_S752>V, E746_A750>VP, E746_E749del, E746_A750>IP, E746_T751>V, E746_A750>DP, E746V, E746_P753>VQ, E746_T751>S, E746_T751>A, E746_T751delELREAT, E746_A750>QP, E746_P753>VS, E746_S752>I, E746_T751>VA, E746_S752>D, E746_S752delELREATS, E746K, E746_T751>L, E746_T751>I, E746_E749delELRE, E746_T751>IP, E746_T751>VP, E746_T751>Q, E746_S752>A, E746_P753>IS, E746_A750delELREA, E746_A750>RP, E746_P753>LS, L747_P753>Q, L747_T751>A, L747_K754>ST, L747_T751>P, L747_T751delLREAT, L747_S752>QH, L747_E749del, L747S, L747_P753>S, L747_A750>P, L747_T751>Q, L747_T751>S, L747_K754delLREATSPK, L747P, L747_S752>Q, L747_E749delLRE, L747_T751>PT, L747_S752delLREATS, L747_A755>AN, T751_I759>S, T751I, T751_I759>N, T751_E758delTSPKANKE, T751_I759>REA, S752P, S752_I759delSPKANKEI, S752Y, P753_I759del, P753S, P753Q, P753_I759delPKANKEI, I759N, D761N, D761Y, M766_A767insAI, A767_S768insTLA, S768N, S768I, S768T, S768_V769>IL, V769_D770insGSV, V769_D770insCV, V769_D770insGVV, V769_D770insASV, D770>GY, D770_N771insSVD, D770_N771insG, D770_P772>ASVDNR, D770_N771insGL, D770_N771insAPW, D770_N771insGF, D770N, D770_N771>AGG, D770_N771insMATP (5' Detection Only), D770_N771insGD, N771>GF, N771_P772insRH, N771_P772>SVDNR, N771>SH, N771>TH, N771>GY, H773_V774insH, H773_V774insNPH, H773_V774insQ, H773_V774insPH, V774M, V774_C775insHV, V774L, R776C, R776H, T790M, T854A, L858M, L858R, L858K, L861Q, L861R, E709fs*1, T751fs*4, H773>NPY (3' Detection Only)
<b>KRAS</b>	G12W, G12C, G12E, G12Y, G12D, G12F, G12R, G12N, G12G, G12S, G12A, G12T, G12V, G12I, G12P, G12_G13insA, G12L, G13A, G13D, G13R, G13N, G13S, G13V, G13I, G13_V14insG, G13C, A59T, Q61K, Q61E, Q61R, Q61H, Q61P, Q61L, A146G, A146T, A146V, A146P
<b>NRAS</b>	G12C, G12Y, G12N, G12A, G12E, G12V, G12P, G13A, G13D, G13R, G13V, G13N, G13Y, Q61K, Q61R, Q61H, Q61P, Q61Q, Q61E, Q61L

The MassARRAY System, OncoFOCUS Panel, iPLEX Pro reagents, Typer software, and SpectroCHIP Array are For Research Use Only. Not for use in diagnostic procedures.

Agena Bioscience's patented nucleic acid analysis by mass spectrometry methods and products are protected under United States patent rights including but not limited to 5,869,242; 6,024,925; 6,440,705; 6,558,623; 6,569,385; 6,730,517; 6,979,425; 6,994,969; 7,019,288; 7,025,933; 7,232,688; 7,285,422; 7,332,275; 7,390,672; 7,501,251; 7,888,127; 7,917,301; 8,003,317; 8,315,805; and 8,349,566 and patents pending including but not limited to US20050272070 and US20130017960, and foreign counterparts including but not limited to, EP0815261B1, EP1173622B1, EP1727911B1, EP1546385B1, EP1332000B1, EP1613723B1, EP1660680B1, and EP2107129B1.

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