

## CAPTURE. CONFIRM. ACCELERATE.

Rapidly screen melanoma samples using a targeted discovery panel of more than 70 somatic mutations in 20 genes.

Agena Bioscience's MelaCarta $^{\text{M}}$  Panel v1.0 is a set of pre-validated assays for cost-effective, efficient mutation screening to help you rapidly profile beyond *BRAF* and other common mutations.



Use tumor samples from fresh, frozen, or formalin-fixed paraffin-embedded tissues (FFPE) and/or cell lines.



Analyze multiple loci with as little as 160 ng DNA per sample.



Detect and quantify mutation frequencies from ≤ 10%.

Assays by Agena also offers panels covering additional oncogenes and somatic mutations. See *www.agenabio.com/oncology* for more information.

<b>GENES INCLUDED IN THE</b>
MELACARTA PANEL v1.0

AKT3	ERBB4	NEK10		
BRAF	GNA11	NRAS		
CDK4	GNAQ	PDGFRA		
CTNNB1	KIT	PIK3CA		
CXCR4	KRAS	PTK2B		
EPHA10	MEK	ROR2		
EPHB6	MET			
See back for complete list of mutations.				

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



#### THE MASSARRAY WORKFLOW

Each sample is subjected to PCR amplification and primer extension with the MelaCarta Panel v1.0 reagents. The extension products are dispensed onto a SpectroCHIP® Array and detected via MassARRAY MALDI-TOF mass spectrometry. After the sample run, an automated software report provides the calls and mutation frequency for each sample as well as a confidence score.

#### **THROUGHPUT**

The MelaCarta Panel v1.0 contains multiplexed assays in 8 wells. The panel can be run in 96-well format (12 samples per plate) or 384-well format (48 samples per plate). Twelve to 384 samples can be processed per day, providing flexibility in sample throughput and batching requirements.

#### **ORDERING INFORMATION**

Choose the best approach for you:

- Order the MelaCarta Panel v1.0 components and run on your own MassARRAY System.
- Send your samples to our Assays by Agena Custom Services Laboratory and have our experienced scientists run the panel for you.

Please contact Agena Bioscience for more information.

# COMPONENTS FOR RUNNING THE MELACARTA PANEL v1.0

**AMPLIFY** 



PCR Enzyme
PCR Accessory Set
MelaCarta v1.0 PCR Primers

**EXTEND** 



iPLEX® Pro Reagent Set MelaCarta v1.0 Extend Primers

DETECT



SpectroCHIP Array and Resin Kit

ANALYZE



Typer Software

### MELACARTA PANEL v1.0 GENES AND MUTATIONS

GENE	MUTATION
AKT3	E17K
BRAF	G466A, G466E, G466V, G469A, G469E, G469R, G469S, G469V, L597Q L597R, L597S, L597V, V600E, V600K, V600L, V600R, K601E
CDK4	R24C, R24H
CTNNB1	S45F, S45Y
CXCR4	V160I
EPHA10	E124K
ЕРНВ6	G404S, R679Q
ERBB4	R393W, E452K
GNA11	R183C, Q209L, Q209P, Q209R
GNAQ	R183Q, Q209L, Q209P
KIT	W557G, W557R, V559A, V559D, V559G, L576P, K642E, D820Y
KRAS	G12A, G12C, G12D, G12F,G12R, G12S, G12V, Q61L, Q61P, Q61R
MEK	Q56P, P124L
MET	T992I, R1170Q
NEK10	E379K
NRAS	G12C, G12R, G12S, G13C, G13R, G13S, Q61E, Q61H, Q61K, Q61L, Q61P, Q61R
PDGFRA	Е996К
PIK3CA	R88Q
PTK2B	G414E, G414V, R429C
ROR2	A793S

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The MelaCarta Panel, MassARRAY System, SpectroCHIP Array, iPLEX Pro Reagents and Typer Software 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; 6,238,871; 6,258,538; 6,300,076; 6,440,705; 6,500,621; 6,558,623; 6,569,385; 6,979,425; 6,994,969; 7,019,288; 7,025,933; 7,285,422; 7,332,275; 7,390,672; 7,419,787; 7,501,251; 7,888,127; 8,003,317; 8,034,567; 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, EP1660580B1, and EP2107129B1.



