

OncoCarta™ Panel v3.0

Available through Assays by Sequenom

Screen for important genetic markers in cancer pathways using rapid analysis of 105 somatic mutations across 22 cancer genes.

Sequenom's OncoCarta Panel v3.0 is a set of pre-validated assays for cost-effective, efficient mutation screening.

- Use tumor samples from fresh, frozen, or formalin fixed, paraffin embedded tissues (FFPE) and/or cell lines.
- Analyze 105 mutations with as little as 480 ng DNA per sample.
- Detect and quantify mutation frequencies from $\geq 10\%$.

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Genes Included in the OncoCarta Panel v3.0:

<i>ABL1</i>	<i>KRAS</i>
<i>APC</i>	<i>MET</i>
<i>BRAF</i>	<i>MLH1</i>
<i>CDKN2A</i>	<i>MYC</i>
<i>CSF1R</i>	<i>PDGFRA</i>
<i>CTNNB1</i>	<i>PTEN</i>
<i>EGFR</i>	<i>RB1</i>
<i>ERBB2</i>	<i>RET</i>
<i>FLT3</i>	<i>STK11</i>
<i>HRAS</i>	<i>TP53</i>
<i>JAK3</i>	<i>VHL</i>

See back for complete list of mutations.

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Analysis Method

PCR amplification and primer extension are performed using the OncoCarta Panel v3.0 reagents. The panel consists of 24 multiplexed wells that are run on each sample using 20 ng of input DNA per well from either fresh, frozen or FFPE tissues or cells. After the sample run, mutations are detected and quantified. From one to eight 96- or 384-well plates can be processed per day providing flexibility in sample throughput and batching requirements.

Equipment and Software Required

- MassARRAY® System
- NanoDispenser
- TYPER 4.0 Software

Ordering Information:

OncoCarta Panel v3.0

10 x 384 Format

10 x 96 Format

2 x 384 Format

- OncoCarta PCR Primers
- OncoCarta Extend Primers
- PCR Reagent Set
- iPLEX® Pro Extension Reagent Set

To place an order, please contact the order desk at orderdesk@sequenom.com, or call (858) 202-9215. AVAILABLE THROUGH ASSAYS BY SEQUENOM

Oncogene	Mutations Detected with the OncoCarta Panel v3.0
ABL1	M244V
APC	R876*, R1114*, E1309fs*4, Q1338*, Q1429*, S1465fs*3, T1661fs*9
BRAF	V471F, N581S, V600M
CDKN2A	R58*, E61*, E69*, H83Y, D84Y
CSF1R	L301S, Y969F, Y969C, Y969H, Y969*
CTNNB1	A13T, V22A, W25_D32DEL, S45A
EGFR	G719D, L730F, G735S, V742A, L747_P753>S, L747_T751>P, H773R, G810D, G810S, L858M,
ERBB2	D769H, V777L
FLT3	D835DEL, I836M
HRAS	G12C, G12R
JAK3	P132T, A572V, V722I
KRAS	Q22K
MET	T1010I, H1112R, H1112Y, M1268T, Y1248C, Y1248H
MLH1	V384D
MYC	P57S, A59V, T73I, N101T, A260A
PDGFRA	D842_D846>E, D842_D846>G, D842_D846>N, D842_M844del, D842_S847>EA, D842I, D842Y, R841_D842del, S566_E571>R
PTEN	K6fs*4, R130fs*4, R130G, R173C, R173H, R233*, P248fs*5, K267fs*9, V317fs*3, N323fs*2, N323fs*21,
RB1	E137*, L199*, R320*, R455*, R556*, R579*, L660FS*2, C706F, E784*
RET	A883F, C634R, D631_L633>E, D631G, D898_E901del, E632_A640>VRP, E768D, F612_C620del
STK11	Q37*, Q170*, D194V, G196V, F264fs*22, P281fs*6, P281L, W332*
TP53	R306*
VHL	L85P, F148fs*11, L158Q, R161*, R167W

Mutations in common across OncoCarta™ panels

Gene	Mutation	OncoCarta™ Panel
BRAF	G466V, G469A/E/R/S/V, L597Q, L597R/S/V, V600E/K/L/R, K601E	OncoCarta v1.0, MelaCarta
CDK4	R24C/H	OncoCarta v1.0, MelaCarta
CTNNB1	S45F/Y	OncoCarta v2.0, MelaCarta
GNAQ	Q209L	OncoCarta v2.0, MelaCarta
KIT	D816V	OncoCarta v1.0, v2.0
	D820Y	OncoCarta v2.0, MelaCarta
	K642E, L576P, V559A/D/G, W557G/R	OncoCarta v1.0, MelaCarta
KRAS	G12A/C/D/F/R/S/V, Q61L/P/R	OncoCarta v1.0, MelaCarta
MET	T992I	OncoCarta v1.0, MelaCarta
NRAS	G12C/R/S, Q61E/H/K/L/P/R	OncoCarta v1.0, MelaCarta
PIK3CA	E542K, Q546K	OncoCarta v1.0, v2.0
	R88Q	OncoCarta v1.0, MelaCarta

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