qBiomarker Copy Number PCR Array (96-Well Format, 384-Well Format [23-gene panel])

Human Kinases & Phosphatases

Cat. no. 337802 VAHS-0001ZA

For real-time PCR-based, copy number analysis

Format	For use with the following real-time cyclers
qBiomarker Copy Number PCR Array, Format A	Applied Biosystems® models 5700, 7000, 7300, 7500, 7700, 7900HT, ViiA 7 (96-well block); Bio-Rad® models iCycler®, iQ™5, MyiQ™, MyiQ2; Bio-Rad/MJ Research Chromo4™; Eppendorf® Mastercycler® ep realplex models 2, 2s, 4, 4s; Stratagene® models Mx3005P®, Mx3000P®; Takara TP-800
qBiomarker Copy Number PCR Array, Format C	Applied Biosystems models 7500 (Fast block), 7900HT (Fast block), StepOnePlus™, ViiA 7 (Fast block)
qBiomarker Copy Number PCR Array, Format D	Bio-Rad CFX96™; Bio-Rad/MJ Research models DNA Engine Opticon®, DNA Engine Opticon 2; Stratagene Mx4000®
qBiomarker Copy Number PCR Array, Format E (23-gene panel)	Applied Biosystems models 7900HT (384-well block), ViiA 7 (384-well block); Bio-Rad CFX384™
qBiomarker Copy Number PCR Array, Format F	Roche® LightCycler® 480 (96-well block)
qBiomarker Copy Number PCR Array, Format G (23-gene panel)	Roche LightCycler 480 (384-well block)

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Sample & Assay Technologies

Description

The Human Kinases & Phosphatases qBiomarker Copy Number PCR Array profiles the copy number of 23 genes encoding kinases or phosphatases reported to undergo frequent genomic alterations. DNA copy number changes in kinases and phosphatases occur frequently in cancer. The genes on the array encode both key kinases and phosphatases that regulate processes such as the cell cycle, insulin and other hormone receptor signaling, PI-3-K signaling, apoptosis, cell migration, and motility. Genes were chosen from the most frequently amplified or deleted kinase and phosphatase genes based on the primary literature and public databases. This array may serve as a useful tool to help classify samples by genotype and help verify phenotypic biomarkers. The array analyzes each gene in each sample in quadruplicate and includes a stable multi-copy reference assay for accurate copy number determination via appropriate DNA input normalization. The simplicity of the product format and operating procedure allow routine and reliable copy number profiling in any research laboratory with access to a real-time PCR instrument.

For further details, consult the *qBiomarker Copy Number PCR Handbook*.

Shipping and storage

qBiomarker Copy Number PCR Arrays are shipped at ambient temperature, on dry ice, or blue ice packs depending on destination and accompanying products. For long term storage, keep plates at –20°C.

Note: Ensure that you have the correct qBiomarker Copy Number PCR Array format for your real-time cycler (see table above).

Note: Open the package and store the products appropriately immediately on receipt.

Array layout (96-well)

For 384-well, 23-gene panel PCR arrays, genes are present in a staggered format. Refer to the *qBiomarker Copy Number PCR Array Handbook* for layout.

	1	2	3	4	5	6	7	8	9	10	11	12
A	AKT1	AKT2	AKT3	ALK	AURKA	CDK4	EGFR	ERBB2	FGFR2	FHIT	IGF1R	MAP2K4
B	MET	PDGFRA	PDK1	PIK3CA	PPAPDC1B	PTEN	PTK2	PTPRD	RPS6KB1	SIK2	STK11	Mref
C	AKT1	AKT2	AKT3	ALK	AURKA	CDK4	EGFR	ERBB2	FGFR2	FHIT	IGF1R	MAP2K4
D	MET	PDGFRA	PDK1	PIK3CA	PPAPDC1B	PTEN	PTK2	PTPRD	RPS6KB1	SIK2	STK11	Mref
E	AKT1	AKT2	AKT3	ALK	AURKA	CDK4	EGFR	ERBB2	FGFR2	FHIT	IGF1R	MAP2K4
F	MET	PDGFRA	PDK1	PIK3CA	PPAPDC1B	PTEN	PTK2	PTPRD	RPS6KB1	SIK2	STK11	Mref
G	AKT1	AKT2	AKT3	ALK	AURKA	CDK4	EGFR	ERBB2	FGFR2	FHIT	IGF1R	MAP2K4
H	MET	PDGFRA	PDK1	PIK3CA	PPAPDC1B	PTEN	PTK2	PTPRD	RPS6KB1	SIK2	STK11	Mref

Gene table: qBiomarker Copy Number PCR Array

Position	Gene ID	Tile	Symbol	Chromosome	Start	End	Assay Catalog #
A01	207	19758446	AKT1	14	105239588	105239716	VPH114-0543285
A02	208	21761123	AKT2	19	40770801	40771000	VPH119-0203855
A03	10000	16526170	AKT3	1	244006201	244006400	VPH101-1220032
A04	238	22016835	ALK	2	30143201	30143400	VPH102-0150717
A05	6790	23374783	AURKA	20	54962801	54963000	VPH120-0274815
A06	1019	18628206	CDK4	12	58145283	58145500	VPH112-0675846
A07	1956	28225285	EGFR	7	55224452	55224525	VPH107-0798903
A08	2064	21154843	ERBB2	17	37871993	37872192	VPH117-0412044
A09	2263	17262424	FGFR2	10	123353223	123353331	VPH110-0685902
A10	2272	23966967	FHIT	3	60522401	60522600	VPH103-0302613
A11	3480	20279899	IGF1R	15	99439986	99440134	VPH115-0520705
A12	6416	20802424	MAP2K4	17	11924801	11925000	VPH117-0059625
B01	4233	28008079	MET	7	116339201	116339400	VPH107-0581697
B02	5156	24944120	PDGFRA	4	55125001	55125200	VPH104-0275626
B03	5163	22733225	PDK1	2	173421201	173421400	VPH102-0867107
B04	5290	24558941	PIK3CA	3	178917201	178917400	VPH103-0894587
B05	84513	28424565	PPAPDC1B	8	38126201	38126400	VPH108-0190632
B06	5728	17024645	PTEN	10	89624401	89624600	VPH110-0448123
B07	5747	28943903	PTK2	8	141993801	141994000	VPH108-0709970
B08	5789	29018521	PTPRD	9	8733601	8733800	VPH109-0043669
B09	6198	21032653	RPS6KB1	17	57970601	57970800	VPH117-0289854
B10	23235	17949452	SIK2	11	111473288	111473422	VPH111-0685184
B11	6794	21853319	STK11	19	1206913	1207202	VPH119-0296051
B12	N/A	N/A	Mref	Multiple	Multiple	Multiple	VPH000-0000000
C01	207	19758446	AKT1	14	105239588	105239716	VPH114-0543285
C02	208	21761123	AKT2	19	40770801	40771000	VPH119-0203855
C03	10000	16526170	AKT3	1	244006201	244006400	VPH101-1220032
C04	238	22016835	ALK	2	30143201	30143400	VPH102-0150717
C05	6790	23374783	AURKA	20	54962801	54963000	VPH120-0274815
C06	1019	18628206	CDK4	12	58145283	58145500	VPH112-0675846
C07	1956	28225285	EGFR	7	55224452	55224525	VPH107-0798903
C08	2064	21154843	ERBB2	17	37871993	37872192	VPH117-0412044
C09	2263	17262424	FGFR2	10	123353223	123353331	VPH110-0685902
C10	2272	23966967	FHIT	3	60522401	60522600	VPH103-0302613
C11	3480	20279899	IGF1R	15	99439986	99440134	VPH115-0520705
C12	6416	20802424	MAP2K4	17	11924801	11925000	VPH117-0059625
D01	4233	28008079	MET	7	116339201	116339400	VPH107-0581697
D02	5156	24944120	PDGFRA	4	55125001	55125200	VPH104-0275626
D03	5163	22733225	PDK1	2	173421201	173421400	VPH102-0867107
D04	5290	24558941	PIK3CA	3	178917201	178917400	VPH103-0894587
D05	84513	28424565	PPAPDC1B	8	38126201	38126400	VPH108-0190632
D06	5728	17024645	PTEN	10	89624401	89624600	VPH110-0448123
D07	5747	28943903	PTK2	8	141993801	141994000	VPH108-0709970
D08	5789	29018521	PTPRD	9	8733601	8733800	VPH109-0043669
D09	6198	21032653	RPS6KB1	17	57970601	57970800	VPH117-0289854

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D11	6794	21853319	STK11	19	1206913	1207202	VPH119-0296051
D12	N/A	N/A	Mref	Multiple	Multiple	Multiple	VPH000-0000000
E01	207	19758446	AKT1	14	105239588	105239716	VPH114-0543285
E02	208	21761123	AKT2	19	40770801	40771000	VPH119-0203855
E03	10000	16526170	AKT3	1	244006201	244006400	VPH101-1220032
E04	238	22016835	ALK	2	30143201	30143400	VPH102-0150717
E05	6790	23374783	AURKA	20	54962801	54963000	VPH120-0274815
E06	1019	18628206	CDK4	12	58145283	58145500	VPH112-0675846
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F01	4233	28008079	MET	7	116339201	116339400	VPH107-0581697
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F03	5163	22733225	PDK1	2	173421201	173421400	VPH102-0867107
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F05	84513	28424565	PPAPDC1B	8	38126201	38126400	VPH108-0190632
F06	5728	17024645	PTEN	10	89624401	89624600	VPH110-0448123
F07	5747	28943903	PTK2	8	141993801	141994000	VPH108-0709970
F08	5789	29018521	PTPRD	9	8733601	8733800	VPH109-0043669
F09	6198	21032653	RPS6KB1	17	57970601	57970800	VPH117-0289854
F10	23235	17949452	SIK2	11	111473288	111473422	VPH111-0685184
F11	6794	21853319	STK11	19	1206913	1207202	VPH119-0296051
F12	N/A	N/A	Mref	Multiple	Multiple	Multiple	VPH000-0000000
G01	207	19758446	AKT1	14	105239588	105239716	VPH114-0543285
G02	208	21761123	AKT2	19	40770801	40771000	VPH119-0203855
G03	10000	16526170	AKT3	1	244006201	244006400	VPH101-1220032
G04	238	22016835	ALK	2	30143201	30143400	VPH102-0150717
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G10	2272	23966967	FHIT	3	60522401	60522600	VPH103-0302613
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H01	4233	28008079	MET	7	116339201	116339400	VPH107-0581697
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H11	6794	21853319	STK11	19	1206913	1207202	VPH119-0296051
H12	N/A	N/A	Mref	Multiple	Multiple	Multiple	VPH000-0000000

Related products

For optimal performance, qBiomarker Copy Number PCR Arrays should be used together with the qBiomarker SYBR® Mastermixes for PCR.

Product	Contents	Cat. no.
qBiomarker SYBR ROX Mastermix (2)*	For 2 x 96 assays in 96-well plates; suitable for use with the following real-time cyclers: Applied Biosystems models 5700, 7000, 7300, 7500 (Standard and FAST), 7700, 7900HT 96-well block (Standard and FAST) and 384-well block, StepOnePlus, ViiA 7 (Standard and Fast 96-well block, 384-well block); Eppendorf Mastercycler ep realplex models 2, 2S, 4, 4S; Stratagene models Mx3000P, Mx3005P, Mx4000; Takara TP-800	337820
qBiomarker SYBR ROX FAST Mastermix (2)*	For 2 x 96 assays in 96-well plates; suitable for use with the following real-time cyclers: Applied Biosystems models 7000, 7300, 7500 (Standard and Fast), 7700, 7900HT (Standard and Fast 96-well block, 384-well block), StepOnePlus; ViiA 7 (Standard and Fast 96-well block, 384-well block); Eppendorf Mastercycler ep realplex with or without ROX filter set; Stratagene models Mx3000, Mx3500, Mx4000; Takara TP-800; Rotor-Gene® Q	337840
qBiomarker SYBR Fluor Mastermix (2)*	For 2 x 96 assays in 96-well plates; suitable for use with the following real-time cyclers: Bio-Rad models iCycler, iQ5, MyiQ, MyiQ2	337830

* Larger kit sizes available; please inquire.

qBiomarker Copy Number PCR Array products are intended for molecular biology applications. These products are not intended for the diagnosis, prevention, or treatment of a disease.

For up-to-date licensing information and product-specific disclaimers, see the respective QIAGEN kit handbook or user manual. QIAGEN kit handbooks and user manuals are available at www.qiagen.com or can be requested from QIAGEN Technical Services or your local distributor.

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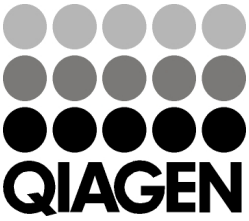

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