

qBiomarker Copy Number PCR Array (Rotor-Gene® Format)

Human Pancreatic Cancer

Cat. no. 337802 VAHS-0054ZR

For real-time PCR-based, copy number analysis

Format	For use with the following real-time cyclers
qBiomarker Copy Number PCR Array, Format R	Rotor-Gene Q, other Rotor-Gene cyclers

Description

The Human Pancreatic Cancer qBiomarker Copy Number PCR Array profiles the copy number of 23 genes reported to undergo frequent genomic alterations in human pancreatic tumor DNA. Pancreatic cancer, the fifth leading cause of cancer death, has a very poor prognosis upon diagnosis due to lack of any symptoms until the cancer reaches a late stage. Improving prognosis requires identifying early molecular markers, and progress has been made in identifying acquired copy number alterations in key oncogenic pathways. A large number of pancreatic tumors possess genetic alterations in signal transduction, transcription factor, and other genes that regulate apoptosis, cell cycle, differentiation, epigenetic modifications, and the Notch and TGF β signaling pathways. Genes were chosen from the most frequently amplified or deleted genes relevant to oncogenic pathways and pancreatic cancer biology based on the primary literature and public databases. This array may serve as a useful tool to help classify pancreatic cancer samples by genotype and help verify pancreatic cancer 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.

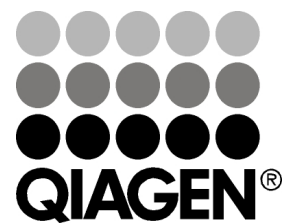
For further details, consult the *qBiomarker Copy Number PCR Handbook*.

Shipping and storage

qBiomarker Copy Number PCR Arrays in the Rotor-Gene format 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

The 96 real-time assays in the Rotor-Gene format are located in wells 1–96 of the Rotor-Disc® (plate A1–A12=Rotor-Disc 1–12, plate B1–B12=Rotor-Disc 13–24, etc.). To maintain data analysis compatibility, wells 97–100 do not contain real-time assays but will contain master mix to account for weight balance.

Gene table: qBiomarker Copy Number PCR Array

Position	Gene ID	Tile	Symbol	Chromosome	Start	End	Assay Catalog #
A01	10552	27921039	ARPC1A	7	98931201	98931400	VPH107-0494657
A02	9639	28242892	ARHGEF10	8	1791601	1791800	VPH108-0008959
A03	8289	16556552	ARID1A	1	27059167	27059283	VPH101-1250414
A04	1030	29084882	CDKN2B	9	22005801	22006000	VPH109-0110030
A05	1522	23419851	CTSZ	20	57571694	57571856	VPH120-0319883
A06	1789	23256809	DNMT3B	20	31368001	31368200	VPH120-0156841
A07	1848	18401087	DUSP6	12	89745201	89745400	VPH112-0448727
A08	1869	23261335	E2F1	20	32273201	32273400	VPH120-0161367
A09	9638	17951019	FEZ1	11	125359359	125359673	VPH111-0686751
A10	3170	23416618	FOXA2	20	22564830	22564916	VPH120-0316650
A11	2627	21554298	GATA6	18	19761414	19761539	VPH118-0391415
A12	55588	21860555	MED29	19	39882000	39882278	VPH119-0303287
B01	4773	23419507	NFATC2	20	50179099	50179168	VPH120-0319539
B02	4855	26710387	NOTCH4	6	32191401	32191600	VPH106-0160958
B03	10298	21755571	PAK4	19	39660401	39660600	VPH119-0198303
B04	5867	16453176	RAB4A	1	229407401	229407600	VPH101-1147038
B05	861	23603204	RUNX1	21	36420801	36421000	VPH121-0182105
B06	864	15432593	RUNX3	1	25290801	25291000	VPH101-0126455
B07	57154	27920089	SMURF1	7	98741201	98741400	VPH107-0493707
B08	7043	19756376	TGFB3	14	76446885	76447236	VPH114-0541215
B09	7161	16553260	TP73	1	3645891	3646012	VPH101-1247122
B10	8295	28227660	TRRAP	7	98478774	98478873	VPH107-0801278
B11	7991	28310925	TUSC3	8	15398201	15398400	VPH108-0076992
B12	N/A	N/A	Mref	Multiple	Multiple	Multiple	VPH000-0000000
C01	10552	27921039	ARPC1A	7	98931201	98931400	VPH107-0494657
C02	9639	28242892	ARHGEF10	8	1791601	1791800	VPH108-0008959
C03	8289	16556552	ARID1A	1	27059167	27059283	VPH101-1250414
C04	1030	29084882	CDKN2B	9	22005801	22006000	VPH109-0110030
C05	1522	23419851	CTSZ	20	57571694	57571856	VPH120-0319883
C06	1789	23256809	DNMT3B	20	31368001	31368200	VPH120-0156841
C07	1848	18401087	DUSP6	12	89745201	89745400	VPH112-0448727
C08	1869	23261335	E2F1	20	32273201	32273400	VPH120-0161367
C09	9638	17951019	FEZ1	11	125359359	125359673	VPH111-0686751
C10	3170	23416618	FOXA2	20	22564830	22564916	VPH120-0316650
C11	2627	21554298	GATA6	18	19761414	19761539	VPH118-0391415
C12	55588	21860555	MED29	19	39882000	39882278	VPH119-0303287
D01	4773	23419507	NFATC2	20	50179099	50179168	VPH120-0319539
D02	4855	26710387	NOTCH4	6	32191401	32191600	VPH106-0160958
D03	10298	21755571	PAK4	19	39660401	39660600	VPH119-0198303
D04	5867	16453176	RAB4A	1	229407401	229407600	VPH101-1147038
D05	861	23603204	RUNX1	21	36420801	36421000	VPH121-0182105
D06	864	15432593	RUNX3	1	25290801	25291000	VPH101-0126455
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D08	7043	19756376	TGFB3	14	76446885	76447236	VPH114-0541215
D09	7161	16553260	TP73	1	3645891	3646012	VPH101-1247122
D10	8295	28227660	TRRAP	7	98478774	98478873	VPH107-0801278
D11	7991	28310925	TUSC3	8	15398201	15398400	VPH108-0076992
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E05	1522	23419851	CTSZ	20	57571694	57571856	VPH120-0319883
E06	1789	23256809	DNMT3B	20	31368001	31368200	VPH120-0156841
E07	1848	18401087	DUSP6	12	89745201	89745400	VPH112-0448727
E08	1869	23261335	E2F1	20	32273201	32273400	VPH120-0161367
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E12	55588	21860555	MED29	19	39882000	39882278	VPH119-0303287
F01	4773	23419507	NFATC2	20	50179099	50179168	VPH120-0319539
F02	4855	26710387	NOTCH4	6	32191401	32191600	VPH106-0160958
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H01	4773	23419507	NFATC2	20	50179099	50179168	VPH120-0319539
H02	4855	26710387	NOTCH4	6	32191401	32191600	VPH106-0160958
H03	10298	21755571	PAK4	19	39660401	39660600	VPH119-0198303
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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™ FAST Mastermix (2)*	For 2 x 96 assays in 96-well plates; suitable for use with the Rotor-Gene Q	337840
QIAamp DNA Mini Kit (50)	For 50 DNA preps: 50 QIAamp Mini Spin Columns, QIAGEN Proteinase K, Reagents, Buffers, Collection Tubes (2 ml)	51304
QIAamp DNA Mini Kit (250)	For 250 DNA preps: 250 QIAamp Mini Spin Columns, QIAGEN Proteinase K, Reagents, Buffers, Collection Tubes (2 ml)	51306
DNeasy Blood & Tissue Kit (50)	For 50 DNA preps: 50 DNeasy Mini Spin Columns, Proteinase K, Buffers, Collection Tubes (2 ml)	69504
DNeasy Blood & Tissue Kit (250)	For 250 DNA preps: 250 DNeasy Mini Spin Columns, Proteinase K, Buffers, Collection Tubes (2 ml)	69506
QIAamp DNA FFPE Tissue Kit (50)	For 50 DNA preps: 50 QIAamp MinElute [®] Columns, Proteinase K, Buffers, Collection Tubes (2 ml)	69506

* 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.

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