

ExProfile™ Human Cervical Cancer Gene qPCR Array

For focused group profiling of human cervical cancer related genes expression

Cat. No. QG066-A (1 x 96-well plate, Format A)

Cat. No. QG066-B (1 x 96-well plate, Format B)

Cat. No. QG066-C (1 x 96-well plate, Format C)

Cat. No. QG066-D (1 x 96-well plate, Format D)

Cat. No. QG066-E (1 x 96-well plate, Format E)

Available as 1 set or 6 sets. Each set contains 84 unique gene primers deposited in one 96-well plate.

Introduction

The ExProfile human cervical cancer gene qPCR array profiles 84 human genes to aberrantly expressed human genes involved in human cervical cancer. These genes are carefully chosen for their close cancer correlation based on a thorough literature search of peer-reviewed publications. Abnormal gene expression is often observed in cancer development and progression. The ExProfile human cervical cancer gene array allows researchers to study the cancer-related genes to gain understanding of their roles in cervical cancer pathogenesis.

- QG066 plate 01: 84 unique gene PCR primer pairs

Shipping and storage condition

Shipped at room temperature

Stable for at least 6 months when stored at -20°C

Array format

GeneCopeia provides five qPCR array formats (A, B, C, D, and E) suitable for use with the following real-time cyclers.

Important note: Upon receiving, please check to make sure that the correct array format was ordered to ensure the compatibility with your qPCR instrument.

Plate format	Instrument provider	qPCR instrument model
A (96-well)	Applied Biosystems	5700, 7000, 7300, 7500, 7700, 7900HT (Standard 96-well block), ViiA™7 (Standard 96-well block)
B (96-well)	Applied Biosystems	7500 (Fast block), 7900HT (Fast block), StepOnePlus™, ViiA™7 (Fast block)
C (96-well)	Bio-Rad Laboratories	iCycler iQ®, MyiQ™, iQ™5
D (96-well)	Bio-Rad Laboratories	CFX96™, DNA Engine Opticon™, DNA Engine Opticon 2™, Chromo4™
E (96-well)	Roche Applied Science	LightCycler® 480 (96-well block)

Quality Control

1. Each pair of primers in the ExProfile gene qPCR array has been experimentally validated to yield a single dissociation curve peak and to generate a single amplicon of the correct size for the targeted gene.
2. The positive PCR controls (PCR) have been verified to amplify a single amplicon of the correct size with Ct values around **20±2**.
3. The Spike-in reverse transcription controls (RT) have been verified to amplify a single amplicon of the correct size with Ct values around **20±3**.
4. $R^2 > 0.99$ was observed for high inter/ intra-array reproducibility.

Materials required but not provided

All-in-One™ First-Strand cDNA Synthesis Kit
 All-in-One™ qPCR Mix
 Total RNA extraction kit (RNAzol® RT RNA extraction reagent is recommended)
 DNase/RNase free tips, PCR reaction tubes, 1.5 ml microcentrifuge tubes
 5 ml and 10 ml graduated pipettes, beakers, flasks, and cylinders
 10 µl to 1,000 µl adjustable single channel micropipettes with disposable tips
 5 µl to 20 µl adjustable multichannel micropipette, disposable tips, and reservoir
 qPCR instrument, compatible with gene qPCR arrays ordered

Array layout

	1	2	3	4	5	6	7	8	9	10	11	12
A	TP53	HLA-DRB1	TNF	MTHFR	IL10	XRCC1	HLA-A	CYP1A1	FASLG	CTLA4	TGFB1	TAP1
B	IL1RN	TAP2	CCND1	IL6	IL1B	IL12B	EGFR	CYP2E1	OGG1	NQO1	CD28	XRCC3
C	MDM2	IL18	ICOS	EPHX1	NAT2	CD83	VEGFA	SOD2	PTGS2	PSMB9	PSMB8	NOS2A
D	MTR	MPO	MMP1	IRF1	IL12A	APEX1	CCR5	TP73	KIR3DL2	LOC729230	TGFBR1	EXO1
E	CDH1	CDC6	CD86	CD80	GGH	XPC	TAPBP	STAT1	ST14	BRCA2	SLIT3	SIPA1
F	CXCL12	RFC1	BARD1	PPP2R1B	PMS1	PIK3CA	REV1	PCNA	NOS3	NBN	MTRR	MMP9
G	MMP2	SMAD7	LIG4	KIR3DL1	KIR2DL4	KIR2DL3	KIR2DL1	KDR	JAK3	IRF3	IL8RB	IL8RA
H	HGDC	HGDC	GAPDH	ACTB	B2M	RPL13A	HPRT1	RN18S1	RT	RT	PCR	PCR

Figure1. Illustration of QG066 plate 01

- **Gene primer pairs:** 84 wells (A row to G row) are designated for a real-time PCR assay for genes (see the primer list).
- **HK1-6:** Six pre-deposited housekeeping gene (HK1-6) primer pairs, which can be used as endogenous positive controls as well as for array normalization.
- **GDC:** Genomic DNA controls, which can be used to specifically detect genomic DNA contamination with a high level of sensitivity.
- **RT:** Spike-in reverse transcription controls, which can be used to monitor the efficiency of the RT reactions. These pre-deposited primer pairs specifically amplify the cDNA template reversed transcribed from the spike-in control RNA in the sample.
- **PCR:** Positive PCR controls, which are used to verify the PCR efficiency by amplifying the pre-deposited DNA template with its specific pre-deposited primer pairs.

Gene Primer List

Plate	Position	Catalog No. of Primer	Accession No. of Gene	Symbol
QG066-01	A01	HQP018175	NM_000546	TP53
QG066-01	A02	HQP054047	BC008403	HLA-DRB1
QG066-01	A03	HQP018141	NM_000594	TNF
QG066-01	A04	HQP011547	NM_005957	MTHFR
QG066-01	A05	HQP009685	NM_000572	IL10
QG066-01	A06	HQP018562	NM_006297	XRCC1
QG066-01	A07	HQP008849	NM_002116	HLA-A
QG066-01	A08	HQP003772	NM_000499	CYP1A1
QG066-01	A09	HQP009671	NM_000639	FASLG
QG066-01	A10	HQP003499	NM_001037631	CTLA4
QG066-01	A11	HQP018044	NM_000660	TGFB1
QG066-01	A12	HQP017899	NM_000593	TAP1
QG066-01	B01	HQP009645	NM_000577	IL1RN
QG066-01	B02	HQP017900	NM_000544	TAP2
QG066-01	B03	HQP016204	NM_053056	CCND1
QG066-01	B04	HQP009670	NM_000600	IL6
QG066-01	B05	HQP009641	NM_000576	IL1B
QG066-01	B06	HQP009693	NM_002187	IL12B
QG066-01	B07	HQP004605	NM_005228	EGFR
QG066-01	B08	HQP003817	NM_000773	CYP2E1
QG066-01	B09	HQP012021	NM_002542	OGG1
QG066-01	B10	HQP004317	NM_000903	NQO1
QG066-01	B11	HQP022699	NM_006139	CD28
QG066-01	B12	HQP018564	NM_005432	XRCC3
QG066-01	C01	HQP011135	NM_002392	MDM2
QG066-01	C02	HQP009718	NM_001562	IL18
QG066-01	C03	HQP008554	NM_012092	ICOS
QG066-01	C04	HQP004948	NM_000120	EPHX1
QG066-01	C05	HQP001136	NM_000015	NAT2
QG066-01	C06	HQP022500	NM_001040280	CD83
QG066-01	C07	HQP018475	NM_001025366	VEGFA
QG066-01	C08	HQP017616	NM_000636	SOD2
QG066-01	C09	HQP015598	NM_000963	PTGS2
QG066-01	C10	HQP015311	NM_002800	PSMB9
QG066-01	C11	HQP015292	NM_148919	PSMB8
QG066-01	C12	HQP011866	NM_000625	NOS2A
QG066-01	D01	HQP011554	NM_000254	MTR
QG066-01	D02	HQP011309	NM_000250	MPO
QG066-01	D03	HQP011255	NM_002421	MMP1
QG066-01	D04	HQP009778	NM_002198	IRF1
QG066-01	D05	HQP009692	NM_000882	IL12A
QG066-01	D06	HQP009061	NM_001641	APEX1
QG066-01	D07	HQP002210	NM_000579	CCR5

Product Data Sheet

QG066-01	D08	HQP018180	NM_005427	TP73
QG066-01	D09	HQP010096	NM_006737	KIR3DL2
QG066-01	D10	HQP054686	NM_001123396	LOC729230
QG066-01	D11	HQP054057	BC071181	TGFBR1
QG066-01	D12	HQP054030	NM_130398	EXO1
QG066-01	E01	HQP023466	NM_004360	CDH1
QG066-01	E02	HQP023354	NM_001254	CDC6
QG066-01	E03	HQP022747	NM_175862	CD86
QG066-01	E04	HQP022722	NM_005191	CD80
QG066-01	E05	HQP021603	NM_003878	GGH
QG066-01	E06	HQP018556	NM_004628	XPC
QG066-01	E07	HQP017903	NM_172208	TAPBP
QG066-01	E08	HQP017764	NM_007315	STAT1
QG066-01	E09	HQP017759	NM_021978	ST14
QG066-01	E10	HQP017753	NM_000059	BRCA2
QG066-01	E11	HQP017498	NM_003062	SLIT3
QG066-01	E12	HQP017259	NM_006747	SIPA1
QG066-01	F01	HQP016670	NM_001033886	CXCL12
QG066-01	F02	HQP016224	NM_002913	RFC1
QG066-01	F03	HQP015946	NM_000465	BARD1
QG066-01	F04	HQP014161	NM_002716	PPP2R1B
QG066-01	F05	HQP013312	NM_000534	PMS1
QG066-01	F06	HQP013150	NM_006218	PIK3CA
QG066-01	F07	HQP012755	NM_001037872	REV1
QG066-01	F08	HQP012420	NM_002592	PCNA
QG066-01	F09	HQP011868	NM_000603	NOS3
QG066-01	F10	HQP011687	NM_002485	NBN
QG066-01	F11	HQP011555	NM_002454	MTRR
QG066-01	F12	HQP011263	NM_004994	MMP9
QG066-01	G01	HQP011256	NM_004530	MMP2
QG066-01	G02	HQP010966	NM_005904	SMAD7
QG066-01	G03	HQP010613	NM_002312	LIG4
QG066-01	G04	HQP010095	NM_013289	KIR3DL1
QG066-01	G05	HQP010089	NM_002255	KIR2DL4
QG066-01	G06	HQP010086	NM_015868	KIR2DL3
QG066-01	G07	HQP010083	NM_014218	KIR2DL1
QG066-01	G08	HQP010070	NM_002253	KDR
QG066-01	G09	HQP009851	NM_000215	JAK3
QG066-01	G10	HQP009780	NM_001571	IRF3
QG066-01	G11	HQP009681	NM_001557	IL8RB
QG066-01	G12	HQP009679	NM_000634	IL8RA
QG066-01	H01	HGDC		
QG066-01	H02	HGDC		
QG066-01	H03	HQP006940	NM_002046	GAPDH
QG066-01	H04	HQP016381	NM_001101	ACTB
QG066-01	H05	HQP015171	NM_004048	B2M
QG066-01	H06	HQP006171	NM_012423	RPL13A

Product Data Sheet

QG066-01	H07	HQP009026	NM_000194	HPRT1
QG066-01	H08	HQP054253	NR_003286	RN18S1
QG066-01	H09	RT		
QG066-01	H10	RT		
QG066-01	H11	PCR		
QG066-01	H12	PCR		

Limited Use License

Following terms and conditions apply to use of ExProfile™ Cervical Cancer Gene qPCR Array (the Product). If the terms and conditions are not acceptable, the Product in its entirety must be returned to GeneCopoeia within 5 calendar days. A limited End-User license is granted to the purchaser of the Product. The Product shall be used by the purchaser for internal research purposes only. The Product is expressly not designed, intended, or warranted for use in humans or for therapeutic or diagnostic use. The Product must not be resold, repackaged or modified for resale, or used to manufacture commercial products or deliver information obtained in service without prior written consent from GeneCopoeia. This Product should be used in accordance with the NIH guidelines developed for recombinant DNA and genetic research. Use of any part of the Product constitutes acceptance of the above terms.

Limited Warranty

GeneCopoeia warrants that the Product meets the specifications described in the accompanying Product Datasheet. If it is proven to the satisfaction of GeneCopoeia that the Product fails to meet these specifications, GeneCopoeia will replace the Product. In the event a replacement cannot be provided, GeneCopoeia will provide the purchaser with a refund. This limited warranty shall not extend to anyone other than the original purchaser of the Product. Notice of nonconforming products must be made to GeneCopoeia within 30 days of receipt of the Product. GeneCopoeia's liability is expressly limited to replacement of Product or a refund limited to the actual purchase price.

GeneCopoeia's liability does not extend to any damages arising from use or improper use of the Product, or losses associated with the use of additional materials or reagents. This limited warranty is the sole and exclusive warranty. GeneCopoeia does not provide any other warranties of any kind, expressed or implied, including the merchantability or fitness of the Product for a particular purpose.

GeneCopoeia is committed to providing our customers with high-quality products. If you should have any questions or concerns about any GeneCopoeia products, please contact us at 301-762-0888.

© 2016 GeneCopoeia, Inc.

GeneCopoeia, Inc.
9620 Medical Center Drive, Suite 101
Rockville, MD 20850
+1 (301) 762-0888
+1 (866) 360-9531
inquiry@genecopoeia.com