

## ExProfile™ Human Endometrial Cancer Gene qPCR Array

**For focused group profiling of human endometrial cancer related genes expression**

Cat. No. QG067-A (1 x 96-well plate, Format A)

Cat. No. QG067-B (1 x 96-well plate, Format B)

Cat. No. QG067-C (1 x 96-well plate, Format C)

Cat. No. QG067-D (1 x 96-well plate, Format D)

Cat. No. QG067-E (1 x 96-well plate, Format E)

Available as 1 set or 6 sets. Each set contains 82 unique gene primers deposited in one 96-well plate.

### Introduction

The ExProfile human endometrial cancer gene qPCR array profiles 82 human genes to aberrantly expressed human genes involved in human endometrial 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 endometrial cancer gene array allows researchers to study the cancer-related genes to gain understanding of their roles in endometrial cancer pathogenesis.

- QG067 plate 01: 82 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
<b>A</b> (96-well)	Applied Biosystems	5700, 7000, 7300, 7500, 7700, 7900HT (Standard 96-well block), ViiA™7 (Standard 96-well block)
<b>B</b> (96-well)	Applied Biosystems	7500 (Fast block), 7900HT (Fast block), StepOnePlus™, ViiA™7 (Fast block)
<b>C</b> (96-well)	Bio-Rad Laboratories	iCycler iQ®, MyiQ™, iQ™5
<b>D</b> (96-well)	Bio-Rad Laboratories	CFX96™, DNA Engine Opticon™, DNA Engine Opticon 2™, Chromo4™
<b>E</b> (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	CYP17A1	CYP19A1	TP53	PTEN	ESR1	CYP1A1	MSH2	MLH1	KRAS	AR	CYP1B1	PGR
B	MSH6	COMT	PIK3CA	SHBG	BRAF	PPARG	MDM2	CYP11A1	XRCC3	XRCC1	VEGFA	SULT1A1
C	SULT1E1	CCND1	PMS2	HSD17B1	ESR2	AKT1	ERCC1	ADRB3	CASP7	CASP3	NCOA3	TNKS2
D	CASP8	XRCC5	XPC	UGT2B7	UCP2	TYMS	TGFB1	TERF2	TERF1	STAR	BRCA2	SRD5A2
E	NOD2	CCL2	RNASE3	ENOSF1	ATR	TLR9	PIK3C2A	ABCB1	PAK3	NME1	MUC1	MTHFR
F	MMP9	MMP3	MMP2	MMP1	LEPR	LEP	IRS1	IGFBP3	IGFBP1	IGF2	IGF1	POT1
G	ERCC4	ERCC2	EGFR	ACE	CTNNB1	CHEK2	NOD1	TP73	OGG1	ERCC5		
H	HGDC	HGDC	GAPDH	ACTB	B2M	RPL13A	HPRT1	RN18S1	RT	RT	PCR	PCR

Figure1. Illustration of QG067 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
QG067-01	A01	HQP003888	NM_000102	CYP17A1
QG067-01	A02	HQP003904	NM_000103	CYP19A1
QG067-01	A03	HQP018175	NM_000546	TP53
QG067-01	A04	HQP015535	NM_000314	PTEN
QG067-01	A05	HQP004998	NM_000125	ESR1
QG067-01	A06	HQP003772	NM_000499	CYP1A1
QG067-01	A07	HQP011491	NM_000251	MSH2
QG067-01	A08	HQP011235	NM_000249	MLH1
QG067-01	A09	HQP010133	NM_004985	KRAS
QG067-01	A10	HQP009801	NM_000044	AR
QG067-01	A11	HQP003775	NM_000104	CYP1B1
QG067-01	A12	HQP013099	NM_000926	PGR
QG067-01	B01	HQP008493	NM_000179	MSH6
QG067-01	B02	HQP002671	NM_000754	COMT
QG067-01	B03	HQP013150	NM_006218	PIK3CA
QG067-01	B04	HQP053959	NM_001040	SHBG
QG067-01	B05	HQP017733	NM_004333	BRAF
QG067-01	B06	HQP013633	NM_005037	PPARG
QG067-01	B07	HQP011135	NM_002392	MDM2
QG067-01	B08	HQP003871	NM_000781	CYP11A1
QG067-01	B09	HQP018564	NM_005432	XRCC3
QG067-01	B10	HQP018562	NM_006297	XRCC1
QG067-01	B11	HQP018475	NM_001025366	VEGFA
QG067-01	B12	HQP017811	NM_177536	SULT1A1
QG067-01	C01	HQP017784	NM_005420	SULT1E1
QG067-01	C02	HQP016204	NM_053056	CCND1
QG067-01	C03	HQP013352	NM_000535	PMS2
QG067-01	C04	HQP009064	NM_000413	HSD17B1
QG067-01	C05	HQP005002	NM_001437	ESR2
QG067-01	C06	HQP004991	NM_001014431	AKT1
QG067-01	C07	HQP004975	NM_202001	ERCC1
QG067-01	C08	HQP003812	NM_000025	ADRB3
QG067-01	C09	HQP020481	NM_033338	CASP7
QG067-01	C10	HQP020297	NM_004346	CASP3
QG067-01	C11	HQP020040	NM_006534	NCOA3
QG067-01	C12	HQP019694	NM_025235	TNKS2
QG067-01	D01	HQP018966	NM_001080124	CASP8
QG067-01	D02	HQP018568	NM_021141	XRCC5
QG067-01	D03	HQP018556	NM_004628	XPC
QG067-01	D04	HQP018418	NM_001074	UGT2B7
QG067-01	D05	HQP018403	NM_003355	UCP2
QG067-01	D06	HQP018342	NM_001071	TYMS
QG067-01	D07	HQP018044	NM_000660	TGFB1

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QG067-01	D08	HQP018016	NM_005652	TERF2
QG067-01	D09	HQP018014	NM_003218	TERF1
QG067-01	D10	HQP017762	NM_000349	STAR
QG067-01	D11	HQP017753	NM_000059	BRCA2
QG067-01	D12	HQP017698	NM_000348	SRD5A2
QG067-01	E01	HQP016801	NM_022162	NOD2
QG067-01	E02	HQP016621	NM_002982	CCL2
QG067-01	E03	HQP016295	NM_002935	RNASE3
QG067-01	E04	HQP014466	NM_017512	ENOSF1
QG067-01	E05	HQP013596	NM_001184	ATR
QG067-01	E06	HQP013388	NM_017442	TLR9
QG067-01	E07	HQP013144	NM_002645	PIK3C2A
QG067-01	E08	HQP013100	NM_000927	ABCB1
QG067-01	E09	HQP012174	NM_002578	PAK3
QG067-01	E10	HQP011853	NM_000269	NME1
QG067-01	E11	HQP011559	NM_001018016	MUC1
QG067-01	E12	HQP011547	NM_005957	MTHFR
QG067-01	F01	HQP011263	NM_004994	MMP9
QG067-01	F02	HQP011257	NM_002422	MMP3
QG067-01	F03	HQP011256	NM_004530	MMP2
QG067-01	F04	HQP011255	NM_002421	MMP1
QG067-01	F05	HQP010584	NM_002303	LEPR
QG067-01	F06	HQP010581	NM_000230	LEP
QG067-01	F07	HQP009788	NM_005544	IRS1
QG067-01	F08	HQP009544	NM_000598	IGFBP3
QG067-01	F09	HQP009539	NM_000596	IGFBP1
QG067-01	F10	HQP009529	NM_000612	IGF2
QG067-01	F11	HQP009518	NM_000618	IGF1
QG067-01	F12	HQP006855	NM_001042594	POT1
QG067-01	G01	HQP004984	NM_005236	ERCC4
QG067-01	G02	HQP004976	NM_000400	ERCC2
QG067-01	G03	HQP004605	NM_005228	EGFR
QG067-01	G04	HQP004081	NM_000789	ACE
QG067-01	G05	HQP003539	NM_001904	CTNNB1
QG067-01	G06	HQP001396	NM_001005735	CHEK2
QG067-01	G07	HQP000459	NM_006092	NOD1
QG067-01	G08	HQP018180	NM_005427	TP73
QG067-01	G09	HQP012021	NM_002542	OGG1
QG067-01	G10	HQP004985	NM_000123	ERCC5
QG067-01	G11			
QG067-01	G12			
QG067-01	H01	HGDC		
QG067-01	H02	HGDC		
QG067-01	H03	HQP006940	NM_002046	GAPDH
QG067-01	H04	HQP016381	NM_001101	ACTB
QG067-01	H05	HQP015171	NM_004048	B2M
QG067-01	H06	HQP006171	NM_012423	RPL13A

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QG067-01	H07	HQP009026	NM_000194	HPRT1
QG067-01	H08	HQP054253	NR_003286	RN18S1
QG067-01	H09	RT		
QG067-01	H10	RT		
QG067-01	H11	PCR		
QG067-01	H12	PCR		

### Limited Use License

Following terms and conditions apply to use of ExProfile™ Endometrial 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.

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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.

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