

ExProfile™ Human Stomach Cancer Gene qPCR Array

For focused group profiling of human Stomach cancer related genes expression

Cat. No. QG079-A (2 x 96-well plate, Format A)

Cat. No. QG079-B (2 x 96-well plate, Format B)

Cat. No. QG079-C (2 x 96-well plate, Format C)

Cat. No. QG079-D (2 x 96-well plate, Format D)

Cat. No. QG079-E (2 x 96-well plate, Format E)

Available as 1 set or 6 sets. Each set contains 168 unique gene primers deposited in two 96-well plates.

Introduction

The ExProfile human stomach cancer gene qPCR array profiles 168 human genes to aberrantly expressed human genes involved in human stomach 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 stomach cancer gene array allows researchers to study the cancer-related genes to gain understanding of their roles in stomach cancer pathogenesis.

- QG079 plate 01: 84 unique gene PCR primer pairs
- QG079 plate 02: 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

GeneCopia 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	IL1B	IL1RN	TNF	MTHFR	IL10	TP53	IL8	CDH1	XRCC1	CYP2E1	TYMS	ERCC2
B	CYP1A1	TGFB1	IL6	OGG1	PTGS2	IL4	VEGFA	ERCC1	HLA-DRB1	XRCC3	NAT2	NOS2A
C	MLH1	IL1A	CD14	CCND1	ABCB1	NOD2	MSH2	KRAS	ACE	PPARG	PGC	MTR
D	MMP2	MDM2	IL12A	FASLG	IL4R	IL2	DPYD	MYCL1	XRCC4	XPC	PTGS1	MTRR
E	MPO	MMP9	APEX1	EGFR	EGF	CDKN2A	DNMT3B	KLF6	NAT1	XRCC2	SULT1A1	SOD2
F	SLC19A1	CCL5	TLR9	NBN	MUC1	KIT	IL18	IL17A	IGFBP3	IFNGR1	APOB	HLA-A
G	GSTM3	ALDH2	EPHX1	CYP2D6	PARP4	PARP1	ADH1C	IL17F	LOC729230	SELS	EXO1	SHBG
H	HGDC	HGDC	GAPDH	ACTB	B2M	RPL13A	HPRT1	RN18S1	RT	RT	PCR	PCR

Figure1. Illustration of QG079 plate 01

	1	2	3	4	5	6	7	8	9	10	11	12
A	SLC23A1	CDA	BTRC	MTMR3	TNFRSF10A	CBS	CDC14A	SSH2	HAVCR2	CASP7	CASP6	CASP3
B	COL18A1	UMPS	TP53BP1	TCN2	STCH	BRCA2	CCL22	RAGE	PTPN1	AICDA	PTEN	B2M
C	PRKCH	LAPTM4B	UGT1A7	SSH1	POLB	PIK3CA	PLCE1	A4GNT	SH3GLB1	SERPINE1	NFKBIA	NFKB1
D	NFE2L2	MYC	MTM1	MMP12	MMP1	MIF	SMAD4	LPL	ARG1	INS	IL12B	IL8RB
E	IL8RA	IL7R	IL5	IGFBP1	IGF2	IGF1R	IFNGR2	BIRC5	HSD17B1	HRAS	APC	HIF1A
F	GTF2A1	MSH6	GSK3B	GPX3	GNAS	LY96	FOLR1	FOLH1	FCGR2A	F5	F2	ECE1
G	AGTR2	AGT	DNMT3A	CYP19A1	CYP17A1	CYP2C19	CYP1B1	CTNNB1	CTLA4	IL23R	VCAN	COMT
H	HGDC	HGDC	GAPDH	ACTB	B2M	RPL13A	HPRT1	RN18S1	RT	RT	PCR	PCR

Figure2. Illustration of QG079 plate 02

- **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.

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- **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
QG079-01	A01	HQP009641	NM_000576	IL1B
QG079-01	A02	HQP009645	NM_000577	IL1RN
QG079-01	A03	HQP018141	NM_000594	TNF
QG079-01	A04	HQP011547	NM_005957	MTHFR
QG079-01	A05	HQP009685	NM_000572	IL10
QG079-01	A06	HQP018175	NM_000546	TP53
QG079-01	A07	HQP009678	NM_000584	IL8
QG079-01	A08	HQP023466	NM_004360	CDH1
QG079-01	A09	HQP018562	NM_006297	XRCC1
QG079-01	A10	HQP003817	NM_000773	CYP2E1
QG079-01	A11	HQP018342	NM_001071	TYMS
QG079-01	A12	HQP004976	NM_000400	ERCC2
QG079-01	B01	HQP003772	NM_000499	CYP1A1
QG079-01	B02	HQP018044	NM_000660	TGFB1
QG079-01	B03	HQP009670	NM_000600	IL6
QG079-01	B04	HQP012021	NM_002542	OGG1
QG079-01	B05	HQP015598	NM_000963	PTGS2
QG079-01	B06	HQP009662	NM_000589	IL4
QG079-01	B07	HQP018475	NM_001025366	VEGFA
QG079-01	B08	HQP004975	NM_202001	ERCC1
QG079-01	B09	HQP054047	BC008403	HLA-DRB1
QG079-01	B10	HQP018564	NM_005432	XRCC3
QG079-01	B11	HQP001136	NM_000015	NAT2
QG079-01	B12	HQP011866	NM_000625	NOS2A
QG079-01	C01	HQP011235	NM_000249	MLH1
QG079-01	C02	HQP009640	NM_000575	IL1A
QG079-01	C03	HQP022490	NM_000591	CD14
QG079-01	C04	HQP016204	NM_053056	CCND1
QG079-01	C05	HQP013100	NM_000927	ABCB1
QG079-01	C06	HQP016801	NM_022162	NOD2
QG079-01	C07	HQP011491	NM_000251	MSH2
QG079-01	C08	HQP010133	NM_004985	KRAS
QG079-01	C09	HQP004081	NM_000789	ACE
QG079-01	C10	HQP013633	NM_005037	PPARG
QG079-01	C11	HQP013087	NM_002630	PGC
QG079-01	C12	HQP011554	NM_000254	MTR
QG079-01	D01	HQP011256	NM_004530	MMP2

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QG079-01	D02	HQP011135	NM_002392	MDM2
QG079-01	D03	HQP009692	NM_000882	IL12A
QG079-01	D04	HQP009671	NM_000639	FASLG
QG079-01	D05	HQP009664	NM_000418	IL4R
QG079-01	D06	HQP009649	NM_000586	IL2
QG079-01	D07	HQP004439	NM_000110	DPYD
QG079-01	D08	HQP011601	NM_005376	MYCL1
QG079-01	D09	HQP018565	NM_003401	XRCC4
QG079-01	D10	HQP018556	NM_004628	XPC
QG079-01	D11	HQP015596	NM_000962	PTGS1
QG079-01	D12	HQP011555	NM_002454	MTRR
QG079-01	E01	HQP011309	NM_000250	MPO
QG079-01	E02	HQP011263	NM_004994	MMP9
QG079-01	E03	HQP009061	NM_001641	APEX1
QG079-01	E04	HQP004605	NM_005228	EGFR
QG079-01	E05	HQP004599	NM_001963	EGF
QG079-01	E06	HQP000370	NM_058195	CDKN2A
QG079-01	E07	HQP004414	NM_006892	DNMT3B
QG079-01	E08	HQP053978	NM_001300	KLF6
QG079-01	E09	HQP023467	NM_000662	NAT1
QG079-01	E10	HQP018563	NM_005431	XRCC2
QG079-01	E11	HQP017811	NM_177536	SULT1A1
QG079-01	E12	HQP017616	NM_000636	SOD2
QG079-01	F01	HQP017482	NM_194255	SLC19A1
QG079-01	F02	HQP016626	NM_002985	CCL5
QG079-01	F03	HQP013388	NM_017442	TLR9
QG079-01	F04	HQP011687	NM_002485	NBN
QG079-01	F05	HQP011559	NM_001018016	MUC1
QG079-01	F06	HQP010099	NM_000222	KIT
QG079-01	F07	HQP009718	NM_001562	IL18
QG079-01	F08	HQP009717	NM_002190	IL17A
QG079-01	F09	HQP009544	NM_000598	IGFBP3
QG079-01	F10	HQP009469	NM_000416	IFNGR1
QG079-01	F11	HQP009218	NM_000384	APOB
QG079-01	F12	HQP008849	NM_002116	HLA-A
QG079-01	G01	HQP008483	NM_000849	GSTM3
QG079-01	G02	HQP005087	NM_000690	ALDH2
QG079-01	G03	HQP004948	NM_000120	EPHX1
QG079-01	G04	HQP003814	NM_000106	CYP2D6
QG079-01	G05	HQP003171	NM_006437	PARP4
QG079-01	G06	HQP003120	NM_001618	PARP1
QG079-01	G07	HQP002413	NM_000669	ADH1C
QG079-01	G08	HQP001495	NM_052872	IL17F
QG079-01	G09	HQP054686	NM_001123396	LOC729230
QG079-01	G10	HQP054043	NM_203472	SELS
QG079-01	G11	HQP054030	NM_130398	EXO1
QG079-01	G12	HQP053959	NM_001040	SHBG

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QG079-01	H01	HGDC		
QG079-01	H02	HGDC		
QG079-01	H03	HQP006940	NM_002046	GAPDH
QG079-01	H04	HQP016381	NM_001101	ACTB
QG079-01	H05	HQP015171	NM_004048	B2M
QG079-01	H06	HQP006171	NM_012423	RPL13A
QG079-01	H07	HQP009026	NM_000194	HPRT1
QG079-01	H08	HQP054253	NR_003286	RN18S1
QG079-01	H09	RT		
QG079-01	H10	RT		
QG079-01	H11	PCR		
QG079-01	H12	PCR		
QG079-02	A01	HQP023414	NM_005847	SLC23A1
QG079-02	A02	HQP023203	NM_001785	CDA
QG079-02	A03	HQP021752	NM_003939	BTRC
QG079-02	A04	HQP021683	NM_021090	MTMR3
QG079-02	A05	HQP021557	NM_003844	TNFRSF10A
QG079-02	A06	HQP021518	NM_000071	CBS
QG079-02	A07	HQP021276	NM_003672	CDC14A
QG079-02	A08	HQP021250	NM_033389	SSH2
QG079-02	A09	HQP020984	NM_032782	HAVCR2
QG079-02	A10	HQP020481	NM_033338	CASP7
QG079-02	A11	HQP020427	NM_001226	CASP6
QG079-02	A12	HQP020297	NM_004346	CASP3
QG079-02	B01	HQP019768	NM_130445	COL18A1
QG079-02	B02	HQP018425	NM_000373	UMPS
QG079-02	B03	HQP018176	NM_005657	TP53BP1
QG079-02	B04	HQP017979	NM_000355	TCN2
QG079-02	B05	HQP017783	NM_006948	STCH
QG079-02	B06	HQP017753	NM_000059	BRCA2
QG079-02	B07	HQP016641	NM_002990	CCL22
QG079-02	B08	HQP016084	NM_014226	RAGE
QG079-02	B09	HQP015828	NM_002827	PTPN1
QG079-02	B10	HQP015565	NM_020661	AICDA
QG079-02	B11	HQP015535	NM_000314	PTEN
QG079-02	B12	HQP015171	NM_004048	B2M
QG079-02	C01	HQP014760	NM_006255	PRKCH
QG079-02	C02	HQP014362	NM_018407	LAPTM4B
QG079-02	C03	HQP013581	NM_019077	UGT1A7
QG079-02	C04	HQP013463	NM_018984	SSH1
QG079-02	C05	HQP013422	NM_002690	POLB
QG079-02	C06	HQP013150	NM_006218	PIK3CA
QG079-02	C07	HQP012501	NM_016341	PLCE1
QG079-02	C08	HQP012448	NM_016161	A4GNT
QG079-02	C09	HQP012393	NM_016009	SH3GLB1
QG079-02	C10	HQP012154	NM_000602	SERPINE1
QG079-02	C11	HQP011810	NM_020529	NFKBIA

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QG079-02	C12	HQP011807	NM_003998	NFKB1
QG079-02	D01	HQP011800	NM_006164	NFE2L2
QG079-02	D02	HQP011597	NM_002467	MYC
QG079-02	D03	HQP011549	NM_000252	MTM1
QG079-02	D04	HQP011266	NM_002426	MMP12
QG079-02	D05	HQP011255	NM_002421	MMP1
QG079-02	D06	HQP011219	NM_002415	MIF
QG079-02	D07	HQP010961	NM_005359	SMAD4
QG079-02	D08	HQP010847	NM_000237	LPL
QG079-02	D09	HQP010127	NM_000045	ARG1
QG079-02	D10	HQP009749	NM_000207	INS
QG079-02	D11	HQP009693	NM_002187	IL12B
QG079-02	D12	HQP009681	NM_001557	IL8RB
QG079-02	E01	HQP009679	NM_000634	IL8RA
QG079-02	E02	HQP009677	NM_002185	IL7R
QG079-02	E03	HQP009666	NM_000879	IL5
QG079-02	E04	HQP009539	NM_000596	IGFBP1
QG079-02	E05	HQP009529	NM_000612	IGF2
QG079-02	E06	HQP009523	NM_000875	IGF1R
QG079-02	E07	HQP009472	NM_005534	IFNGR2
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QG079-02	E09	HQP009064	NM_000413	HSD17B1
QG079-02	E10	HQP009036	NM_005343	HRAS
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QG079-02	E12	HQP008832	NM_181054	HIF1A
QG079-02	F01	HQP008494	NM_015859	GTF2A1
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QG079-02	F06	HQP006296	NM_015364	LY96
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QG079-02	F08	HQP006129	NM_001014986	FOLH1
QG079-02	F09	HQP005280	NM_021642	FCGR2A
QG079-02	F10	HQP005058	NM_000130	F5
QG079-02	F11	HQP005052	NM_000506	F2
QG079-02	F12	HQP004537	NM_001397	ECE1
QG079-02	G01	HQP004525	NM_000686	AGTR2
QG079-02	G02	HQP004494	NM_000029	AGT
QG079-02	G03	HQP004411	NM_022552	DNMT3A
QG079-02	G04	HQP003904	NM_000103	CYP19A1
QG079-02	G05	HQP003888	NM_000102	CYP17A1
QG079-02	G06	HQP003809	NM_000769	CYP2C19
QG079-02	G07	HQP003775	NM_000104	CYP1B1
QG079-02	G08	HQP003539	NM_001904	CTNNB1
QG079-02	G09	HQP003499	NM_001037631	CTLA4
QG079-02	G10	HQP003495	NM_144701	IL23R

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QG079-02	G11	HQP003299	NM_004385	VCAN
QG079-02	G12	HQP002671	NM_000754	COMT
QG079-02	H01	HGDC		
QG079-02	H02	HGDC		
QG079-02	H03	HQP006940	NM_002046	GAPDH
QG079-02	H04	HQP016381	NM_001101	ACTB
QG079-02	H05	HQP015171	NM_004048	B2M
QG079-02	H06	HQP006171	NM_012423	RPL13A
QG079-02	H07	HQP009026	NM_000194	HPRT1
QG079-02	H08	HQP054253	NR_003286	RN18S1
QG079-02	H09	RT		
QG079-02	H10	RT		
QG079-02	H11	PCR		
QG079-02	H12	PCR		

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Following terms and conditions apply to use of ExProfile™ Stomach 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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