

ExProfile™ Human Interferon Related Gene qPCR Array

For focused group profiling of human interferon related gene expression

Cat. No. QG032-A (1 x 96-well plate, Format A)

Cat. No. QG032-B (1 x 96-well plate, Format B)

Cat. No. QG032-C (1 x 96-well plate, Format C)

Cat. No. QG032-D (1 x 96-well plate, Format D)

Cat. No. QG032-E (1 x 96-well plate, Format E)

Plates available individually or as a set of 6. Each set contains 84 unique gene primer pairs deposited in one 96-well plate.

Introduction

The ExProfile human interferon related gene qPCR array profiles the expression of 84 human genes related to the function and molecular mechanism of interferon. These genes are carefully chosen for their close pathway correlation based on a thorough literature search of peer-reviewed publications. This array allows researchers to study pathway-related genes to gain understanding of their roles in the function and molecular mechanism of interferon.

- QG032 plate 01: 84 unique gene PCR primer pairs

Shipping and storage conditions

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 receipt, please check to make sure that the correct array format was ordered to ensure 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	PPIA	UBQLN2	ACTB	B2M	BLNK	CCR1	CD80	CSF2	CSF3	CXCL11	CXCL2	CXCL3
B	CXCL9	GUSB	HPRT1	IFI44	IFIT3	IL10	IL15	IL1B	IL23A	IRF7	ISG20	LILRA1
C	MAP3K8	MMP3	MMP9	MX1	OAS1	OAS2	PDGFB	RPL13A	STAT1	TLR1	TLR3	TLR7
D	USP18	ALOX5	ASB13	BATF2	C3AR1	CD163	CD59	CD86	CXCL1	DDX58	FLJ20035	DEFA1
E	LGP2	ELF1	ELF4	ETV6	FCGR1A	FPRL1	GBP4	HAP1	HK2	HSP90AB1	KDR	LBR
F	LHX2	LIPG	MEF2A	NBN	NCOA2	NONO	PDCD1	PFKFB3	PSMB8	PVRL4	PYHIN1	SP100
G	SPATA2	SPTLC2	TBP	TFRC	TLR4	TRIM14	USP15	XAF1	ZBP1	FAM14A	PTGS2	IL27
H	HGDC	HGDC	GAPDH	ACTB	B2M	RPL13A	HPRT1	RN18S1	RT	RT	PCR	PCR

Figure1. Illustration of QG032 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 reverse 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
QG032-01	A01	HQP013694	NM_021130	PPIA
QG032-01	A02	HQP008650	NM_013444	UBQLN2
QG032-01	A03	HQP016381	NM_001101	ACTB
QG032-01	A04	HQP015171	NM_004048	B2M
QG032-01	A05	HQP008515	NM_013314	BLNK
QG032-01	A06	HQP002198	NM_001295	CCR1
QG032-01	A07	HQP022722	NM_005191	CD80
QG032-01	A08	HQP003159	NM_000758	CSF2
QG032-01	A09	HQP003173	NM_000759	CSF3
QG032-01	A10	HQP016649	NM_005409	CXCL11
QG032-01	A11	HQP008458	NM_002089	CXCL2
QG032-01	A12	HQP008459	NM_002090	CXCL3
QG032-01	B01	HQP011220	NM_002416	CXCL9
QG032-01	B02	HQP008583	NM_000181	GUSB
QG032-01	B03	HQP009026	NM_000194	HPRT1
QG032-01	B04	HQP000670	NM_006417	IFI44
QG032-01	B05	HQP009416	NM_001031683	IFIT3
QG032-01	B06	HQP009685	NM_000572	IL10
QG032-01	B07	HQP009708	NM_000585	IL15
QG032-01	B08	HQP009641	NM_000576	IL1B
QG032-01	B09	HQP012859	NM_016584	IL23A
QG032-01	B10	HQP009785	NM_001572	IRF7
QG032-01	B11	HQP009789	NM_002201	ISG20
QG032-01	B12	HQP001164	NM_006863	LILRA1
QG032-01	C01	HQP002725	NM_005204	MAP3K8
QG032-01	C02	HQP011257	NM_002422	MMP3
QG032-01	C03	HQP011263	NM_004994	MMP9
QG032-01	C04	HQP011582	NM_002462	MX1
QG032-01	C05	HQP011983	NM_001032409	OAS1
QG032-01	C06	HQP011988	NM_001032731	OAS2
QG032-01	C07	HQP012857	NM_033016	PDGFB
QG032-01	C08	HQP006171	NM_012423	RPL13A
QG032-01	C09	HQP017764	NM_007315	STAT1
QG032-01	C10	HQP018113	NM_003263	TLR1
QG032-01	C11	HQP018115	NM_003265	TLR3
QG032-01	C12	HQP012591	NM_016562	TLR7
QG032-01	D01	HQP001496	NM_017414	USP18
QG032-01	D02	HQP006359	NM_000698	ALOX5
QG032-01	D03	HQP019227	NM_024701	ASB13
QG032-01	D04	HQP001840	NM_138456	BATF2
QG032-01	D05	HQP018239	NM_004054	C3AR1

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QG032-01	D06	HQP022548	NM_004244	CD163
QG032-01	D07	HQP023056	NM_000611	CD59
QG032-01	D08	HQP022747	NM_175862	CD86
QG032-01	D09	HQP008456	NM_001511	CXCL1
QG032-01	D10	HQP006239	NM_014314	DDX58
QG032-01	D11	HQP014498	NM_017631	FLJ20035
QG032-01	D12	HQP004173	NM_004084	DEFA1
QG032-01	E01	HQP018936	NM_024119	LGP2
QG032-01	E02	HQP004712	NM_172373	ELF1
QG032-01	E03	HQP004735	NM_001421	ELF4
QG032-01	E04	HQP005022	NM_001987	ETV6
QG032-01	E05	HQP005251	NM_000566	FCGR1A
QG032-01	E06	HQP006244	NM_001005738	FPRL1
QG032-01	E07	HQP001794	NM_052941	GBP4
QG032-01	E08	HQP021850	NM_177977	HAP1
QG032-01	E09	HQP008843	NM_000189	HK2
QG032-01	E10	HQP009097	NM_007355	HSP90AB1
QG032-01	E11	HQP010070	NM_002253	KDR
QG032-01	E12	HQP010563	NM_002296	LBR
QG032-01	F01	HQP022587	NM_004789	LHX2
QG032-01	F02	HQP022648	NM_006033	LIPG
QG032-01	F03	HQP011149	NM_005587	MEF2A
QG032-01	F04	HQP011687	NM_002485	NBN
QG032-01	F05	HQP000603	NM_006540	NCOA2
QG032-01	F06	HQP011864	NM_007363	NONO
QG032-01	F07	HQP012662	NM_005018	PDCD1
QG032-01	F08	HQP013072	NM_004566	PFKFB3
QG032-01	F09	HQP015292	NM_148919	PSMB8
QG032-01	F10	HQP019923	NM_030916	PVRL4
QG032-01	F11	HQP003517	NM_152501	PYHIN1
QG032-01	F12	HQP017647	NM_003113	SP100
QG032-01	G01	HQP023244	NM_006038	SPATA2
QG032-01	G02	HQP022852	NM_004863	SPTLC2
QG032-01	G03	HQP017928	NM_003194	TBP
QG032-01	G04	HQP018041	NM_003234	TFRC
QG032-01	G05	HQP018116	NM_138554	TLR4
QG032-01	G06	HQP023251	NM_033220	TRIM14
QG032-01	G07	HQP023408	NM_006313	USP15
QG032-01	G08	HQP013661	NM_199139	XAF1
QG032-01	G09	HQP019822	NM_030776	ZBP1
QG032-01	G10	HQP020411	NM_032036	FAM14A
QG032-01	G11	HQP015598	NM_000963	PTGS2
QG032-01	G12	HQP006424	NM_145659	IL27
QG032-01	H01	HGDC		
QG032-01	H02	HGDC		
QG032-01	H03	HQP006940	NM_002046	GAPDH
QG032-01	H04	HQP016381	NM_001101	ACTB

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QG032-01	H05	HQP015171	NM_004048	B2M
QG032-01	H06	HQP006171	NM_012423	RPL13A
QG032-01	H07	HQP009026	NM_000194	HPRT1
QG032-01	H08	HQP054253	NR_003286	RN18S1
QG032-01	H09	RT		
QG032-01	H10	RT		
QG032-01	H11	PCR		
QG032-01	H12	PCR		

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Following terms and conditions apply to use of ExProfile™ Human Interferon Related 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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QG032-160202