# EpiTect® Methyl II Signature PCR Array (22) Human Gastric Cancer

Cat. no. 335212 EAHS-021ZA

#### For DNA methylation analysis using MethylScreen™ technology

The Human Gastric Cancer EpiTect Methyl II Signature PCR Array profiles the methylation status of 22 tumor suppressor gene promoters whose hypermethylation has been reported in the literature to occur frequently in a variety of gastric tumors. Profiling tumor samples with these arrays may help correlate CpG island methylation status with biological phenotypes. The results may also provide insights into the molecular mechanisms and biological pathways behind gastric cancer development and progression, as well as its pathology. With a simple restriction enzyme digestion and real-time PCR, research studies can analyze the methylation status of 22 different gastric cancer genes with this DNA methylation PCR array. The EpiTect Methyl II PCR Arrays use MethylScreen™ technology provided under license from Orion Genomics, LLC. For further details, consult the EpiTect Methyl II PCR Array Handbook.

#### Shipping and storage

EpiTect Methyl II Signature PCR Arrays are shipped at room temperature (15–25°C), on dry ice, or on blue ice depending on the destination and accompanying products. They should be stored at –20°C. Ensure that you have the correct EpiTect Methyl II Signature PCR Array format for your instrument before starting the experiment.

Note: Open the package and store the products appropriately immediately on receipt.



### Contents

Product	Contents	Cat. no.
EpiTect Methyl II Signature PCR Array (22) Format A	2, 12, or 24 x 96-well plates, Optical Thin-Wall 8-Cap Strips; for use with the following real-time cyclers: Applied Biosystems® models 5700, 7000, 7300, 7500, 7700, 7900HT, ViiA™ 7 (96-well block); Bio-Rad® models iCycler®, iQ™5, MyiQ™, MyiQ2; Bio-Rad/MJ Research Chromo4™; Eppendorf® MasterCycler® ep realplex models 2, 2s, 4, 4s; Stratagene® models Mx3005P®, Mx3000P®	Varies
EpiTect Methyl II Signature PCR Array (22) Format C	2, 12, or 24 x 96-well plates, Optical Adhesive Film; for use with the following real-time cyclers: Applied Biosystems models 7500 (Fast block), 7900HT (Fast block), StepOnePlus™, ViiA 7 (Fast block)	Varies
EpiTect Methyl II Signature PCR Array (22) Format D	2, 12, or 24 x 96-well plates, Optical Thin-Wall 8-Cap Strips; for use with the following real-time cyclers: Bio-Rad CFX96™; Bio-Rad/MJ Research models DNA Engine Opticon®, DNA Engine Opticon 2; Stratagene Mx4000®	Varies
EpiTect Methyl II Signature PCR Array (22) Format E	4 x 384-well plates, 384EZLoad Covers, Optical Adhesive Film; for use with the following real-time cyclers: Applied Biosystems models 7900HT (384-well block), ViiA 7 (384-well block); Bio-Rad CFX384™	Varies
EpiTect Methyl II Signature PCR Array (22) Format F	2, 12, or 24 x 96-well plates, Optical Adhesive Film; for use with the following real-time cyclers: Roche® LightCycler® 480 (96-well block)	Varies
EpiTect Methyl II Signature PCR Array (22) Format G	4 x 384-well plates, 384EZLoad Covers, Optical Adhesive Film; for use with the following real-time cyclers: Roche: LightCycler 480 (384-well block)	Varies

# Array layout

	1	2	3	4	5	6	7	8	9	10	11	12
A	CCND2	CDH1	CDH13	CDKN2A	CHFR	DKK2	FHIT	KLF4	LOX	MGMT	MLH1	PRKCDBP
В	PTGS2	RARB	RASSF1	RB1	RUNX3	SFN	SFRP2	SFRP5	TIMP3	TMEFF2	EP_SEC	EP_DEC
с	CCND2	CDH1	CDH13	CDKN2A	CHFR	DKK2	FHIT	KLF4	LOX	MGMT	MLH1	PRKCDBP
D	PTGS2	RARB	RASSF1	RB1	RUNX3	SFN	SFRP2	SFRP5	TIMP3	TMEFF2	EP_SEC	EP_DEC
E	CCND2	CDH1	CDH13	CDKN2A	CHFR	DKK2	FHIT	KLF4	LOX	MGMT	MLH1	PRKCDBP
F	PTGS2	RARB	RASSF1	RB1	RUNX3	SFN	SFRP2	SFRP5	TIMP3	TMEFF2	EP_SEC	EP_DEC
G	CCND2	CDH1	CDH13	CDKN2A	CHFR	DKK2	FHIT	KLF4	LOX	MGMT	MLH1	PRKCDBP
н	PTGS2	RARB	RASSF1	RB1	RUNX3	SFN	SFRP2	SFRP5	TIMP3	TMEFF2	EP_SEC	EP_DEC

## Gene table

		GenBank OR	Gene			
Position	Unigene	miRNA	Symbol OR	Description	Gene Name	
		Accession	miRNA ID	·		
A01, C01, E01, G01	Hs.376071	NM 001759	CCND2	Cyclin D2	KIAK0002, MGC102758	
				Cadherin 1, type 1, E-cadherin	Arc-1, CD324, CDHE, ECAD,	
A02, C02, E02, G02	Hs.461086	NM_004360	CDH1	(epithelial)	LCAM, UVO	
A03, C03, E03, G03	Hs.654386	NM_001257	CDH13	Cadherin 13, H-cadherin (heart)	CDHH, P105	
A04, C04, E04, G04	Hs.512599	NM_000077	CDKN2A	Cyclin-dependent kinase inhibitor 2A (melanoma, p16, inhibits CDK4)	ARF, CDK4I, CDKN2, CMM2, INK4, INK4A, MLM, MTS-1, MTS1, P14, P14ARF, P16, P16-INK4A, P16INK4, P16INK4A, P19, P19ARF, TP16	
A05, C05, E05, G05	Hs.656770	NM_018223	CHFR	Checkpoint with forkhead and ring finger domains	FLJ10796, FLJ33629, RNF116, RNF196	
A06, C06, E06, G06	Hs.211869	NM_014421	DKK2	Dickkopf homolog 2 (Xenopus laevis)	DKK-2	
A07, C07, E07, G07	Hs.715588	NM_002012	FHIT	Fragile histidine triad gene	AP3Aase, FRA3B	
A08, C08, E08, G08	Hs.376206	NM_004235	KLF4	Kruppel-like factor 4 (gut)	EZF, GKLF	
A09, C09, E09, G09	Hs.102267	NM_002317	LOX	Lysyl oxidase	MGC105112	
A10, C10, E10, G10	Hs.501522	NM_002412	MGMT	O-6-methylguanine-DNA methyltransferase		
A11, C11, E11, G11	Hs.195364	NM_000249	MLH1	MutL homolog 1, colon cancer, nonpolyposis type 2 (E. coli)	COCA2, FCC2, HNPCC, HNPCC2, MGC5172, hMLH1	
A12, C12, E12, G12	Hs.434044	NM_145040	PRKCDBP	Protein kinase C, delta binding protein	CAVIN3, HSRBC, MGC20400, SRBC, cavin-3	
B01, D01, F01, H01	Hs.196384	NM_000963	PTGS2	Prostaglandin-endoperoxide synthase 2 (prostaglandin G/H synthase and cyclooxygenase)	COX-2, COX2, GRIPGHS, PGG, HS, PGHS-2, PHS-2, hCox-2	
B02, D02, F02, H02	Hs.654490	NM_000965	RARB	Retinoic acid receptor, beta	HAP, NR1B2, RRB2	
B03, D03, F03, H03	Hs.476270	NM_007182	RASSF1	Ras association (RalGDS/AF-6) domain family member 1	123F2, NORE2A, RASSF1A, RDA32, REH3P21	
B04, D04, F04, H04	Hs.408528	NM_000321	RB1	Retinoblastoma 1	OSRC, RB, p105-Rb, pRb, pp110	
B05, D05, F05, H05	Hs.170019	NM_004350	RUNX3	Runt-related transcription factor 3	AML2, CBFA3, FLJ34510, MGC16070, PEBP2aC	
B06, D06, F06, H06	Hs.523718	NM_006142	SFN	Stratifin	YWHAS	
B07, D07, F07, H07	Hs.481022	NM_003013	SFRP2	Secreted frizzled-related protein 2	FRP-2, SARP1, SDF-5	
B08, D08, F08, H08	Hs.279565	NM_003015	SFRP5	Secreted frizzled-related protein 5	SARP3	
B09, D09, F09, H09	Hs.644633	NM_000362	TIMP3	TIMP metallopeptidase inhibitor 3	HSMRK222, K222, K222TA2, SFD	
B10, D10, F10, H10	Hs.144513	NM_016192	TMEFF2	Transmembrane protein with EGF-like and two follistatin-like domains 2	CT120.2, HPP1, TENB2, TPEF, TR	
B11, D11, F11, H11	N/A	SA_00148	EP_SEC	SEC-sensitive enzyme control assay	SEC	
B12, D12, F12, H12	N/A	SA_00149	EP_DEC	DEC-dependent enzyme control assay	DEC	

# Related products

Product	Contents	Cat. no.
EpiTect Methyl II DNA Restriction Kit (12)	Reagents for the cleavage of methylated and unmethylated DNA for processing up to 12 DNA samples; 5x Restriction Digestion Buffer, Methylation-sensitive Enzyme A, Methylation-dependent Enzyme B	335452
RT <sup>2</sup> SYBR <sup>®</sup> Green qPCR Mastermixes(2)*	For 2 x 96 assays in 96-well plates; suitable for use with real-time cyclers that do not require a reference dye, including: Bio-Rad models CFX96, CFX384; Bio-Rad/MJ Research models Chromo4, DNA Engine Opticon 2; Roche LightCycler 480 (96-well and 384-well); all other cyclers	330500
RT <sup>2</sup> SYBR Green ROX <sup>™</sup> qPCR Mastermixes(2)*	For 2 x 96 assays in 96-well plates; suitable for use with the following real-time cyclers: Applied Biosystems models 5700, 7000, 7300, 7500 [Standard and Fast], 7700, 7900HT 96-well block [Standard and Fast] and 384-well block, StepOnePlus; Eppendorf Mastercycler ep realplex models 2, 2S, 4, 4S; Stratagene models Mx3000P, Mx3005P, Mx4000	330520
RT <sup>2</sup> SYBR Green Fluor qPCR Mastermixes(2)*	For 2 x 96 assays in 96-well plates; suitable for use with the following real-time cyclers: Bio-Rad models iCycler, iQ5, MyiQ, MyiQ2	330510
Accessories		
EpiTect Methyl II Custom PCR Array	For methylation analysis of customer-selected genes in a 96-well or 384-well plate format	335112
EpiTect Methyl II Complete PCR Array (94)	For methylation analysis of 94 genes in a 96-well or 384-well plate format	335222
EpiTect Methyl II PCR Assay (200)	Laboratory-tested forward and reverse primers for 200 x 25 $\mu$ l reactions; 25 $\mu$ l per primer; total volume: 200 $\mu$ l	335002
RT <sup>2</sup> PCR Array Loading Reservoir	12 x 5 ml capacity, irradiation sterilized reservoirs for convenient sample loading on PCR arrays	338162

<sup>\*</sup> Larger kit sizes available; please inquire.

EpiTect Methyl II Signature PCR Array products are intended for molecular biology applications. These products are not intended for the diagnosis, prevention, or treatment of a disease.

QIAGEN reserves the right to occasionally redesign individual assays on the EpiTect Methyl II PCR Arrays for improved performance. This revision history can be obtained by contacting technical support and providing the batch numbers from your arrays.

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