

EpiTect® Methyl II Signature PCR Array (22)

Human Apoptosis

Cat. no. 335212 EAHS-121ZA

For DNA methylation analysis using MethylScreen™ technology

The Human Apoptosis EpiTect Methyl II Signature PCR Array profiles the promoter methylation status of a panel of 22 promoters of genes involved in apoptosis, or programmed cell death. Dysregulation of apoptosis, leading to uncontrolled cell growth, is a hallmark of carcinogenesis. Hypermethylation of pro-apoptotic genes (BNIP3L) silences their expression, which can lead to tumor progression. Profiling cellular or fresh tissue genomic DNA samples with these arrays may help correlate CpG island methylation status with biological phenotypes. The results may also help provide further insights into the role dysregulated apoptosis plays in diseases such as cancer. With a simple restriction enzyme digestion and real-time PCR, research studies can analyze the promoter methylation status of 22 different apoptosis 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	APAF1	BAD	BAX	BCL2L11	BCLAF1	BID	BIK	BIRC2	BNIP3L	CASP3	CASP9	CIDEB
B	CRADD	DAPK1	DFFA	FADD	GADD45A	HRK	LTBR	TNFRSF21	TNFRSF25	TP53	EP_SEC	EP_DEC
C	APAF1	BAD	BAX	BCL2L11	BCLAF1	BID	BIK	BIRC2	BNIP3L	CASP3	CASP9	CIDEB
D	CRADD	DAPK1	DFFA	FADD	GADD45A	HRK	LTBR	TNFRSF21	TNFRSF25	TP53	EP_SEC	EP_DEC
E	APAF1	BAD	BAX	BCL2L11	BCLAF1	BID	BIK	BIRC2	BNIP3L	CASP3	CASP9	CIDEB
F	CRADD	DAPK1	DFFA	FADD	GADD45A	HRK	LTBR	TNFRSF21	TNFRSF25	TP53	EP_SEC	EP_DEC
G	APAF1	BAD	BAX	BCL2L11	BCLAF1	BID	BIK	BIRC2	BNIP3L	CASP3	CASP9	CIDEB
H	CRADD	DAPK1	DFFA	FADD	GADD45A	HRK	LTBR	TNFRSF21	TNFRSF25	TP53	EP_SEC	EP_DEC

Gene table

Position	Unigene	GenBank OR miRNA Accession	Gene Symbol OR miRNA ID	Description	Gene Name
A01, C01, E01, G01	Hs.728891	NM_001160	APAF1	Apoptotic peptidase activating factor 1	APAF-1, CED4, DKFZp781B1145
A02, C02, E02, G02	Hs.370254	NM_004322	BAD	BCL2-associated agonist of cell death	BBC2, BCL2L8
A03, C03, E03, G03	Hs.624291	NM_004324	BAX	BCL2-associated X protein	BCL2L4
A04, C04, E04, G04	Hs.469658	NM_006538	BCL2L11	BCL2-like 11 (apoptosis facilitator)	BAM, BIM, BIM-alpha6, BIM-beta6, BIM-beta7, BOD, BimEL, BimL
A05, C05, E05, G05	Hs.486542	NM_014739	BCLAF1	BCL2-associated transcription factor 1	BTF, KIAA0164, bK21119.1
A06, C06, E06, G06	Hs.591054	NM_001196	BID	BH3 interacting domain death agonist	FP497, MGC15319, MGC42355
A07, C07, E07, G07	Hs.475055	NM_001197	BIK	BCL2-interacting killer (apoptosis-inducing)	BIP1, BP4, NBK
A08, C08, E08, G08	Hs.696238	NM_001166	BIRC2	Baculoviral IAP repeat containing 2	API1, HIAP2, Hiap-2, MIHB, RNF48, c-IAP1, dIAP1
A09, C09, E09, G09	Hs.131226	NM_004331	BNIP3L	BCL2/adenovirus E1B 19kDa interacting protein 3-like	BNIP3a, NIX
A10, C10, E10, G10	Hs.141125	NM_004346	CASP3	Caspase 3, apoptosis-related cysteine peptidase	CPP32, CPP32B, SCA-1
A11, C11, E11, G11	Hs.329502	NM_001229	CASP9	Caspase 9, apoptosis-related cysteine peptidase	APAF-3, APAF3, CASPASE-9c, ICE-LAP6, MCH6
A12, C12, E12, G12	Hs.642693	NM_014430	CIDEB	Cell death-inducing DFFA-like effector b	
B01, D01, F01, H01	Hs.38533	NM_003805	CRADD	CASP2 and RIPK1 domain containing adaptor with death domain	MGC9163, RAIDD
B02, D02, F02, H02	Hs.380277	NM_004938	DAPK1	Death-associated protein kinase 1	DAPK, DKFZp7811035
B03, D03, F03, H03	Hs.484782	NM_004401	DFFA	DNA fragmentation factor, 45kDa, alpha polypeptide	DFF-45, DFF1, ICAD
B04, D04, F04, H04	Hs.86131	NM_003824	FADD	Fas (TNFRSF6)-associated via death domain	MGC8528, MORT1
B05, D05, F05, H05	Hs.80409	NM_001924	GADD45A	Growth arrest and DNA-damage-inducible, alpha	DDIT1, GADD45
B06, D06, F06, H06	Hs.87247	NM_003806	HRK	Harakiri, BCL2 interacting protein (contains only BH3 domain)	DP5, HARAKIRI
B07, D07, F07, H07	Hs.11116	NM_002342	LTBR	Lymphotoxin beta receptor (TNFR superfamily, member 3)	CD18, D12S370, LT-BETA-R, TNF-R-III, TNFCR, TNFR-RP, TNFR2-RP, TNFRSF3
B08, D08, F08, H08	Hs.443577	NM_014452	TNFRSF21	Tumor necrosis factor receptor superfamily, member 21	BM-018, DR6, MGC31965
B09, D09, F09, H09	Hs.462529	NM_003790	TNFRSF25	Tumor necrosis factor receptor superfamily, member 25	APO-3, DDR3, DR3, LARD, TNFRSF12, TR3, TRAMP, WSL-1, WSL-LR
B10, D10, F10, H10	Hs.654481	NM_000546	TP53	Tumor protein p53	FLJ92943, LFS1, P53, TRP53
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 ² SYBR [®] 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 ² SYBR Green ROX [™] 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 ² 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 µl reactions; 25 µl per primer; total volume: 200 µl	335002
RT ² PCR Array Loading Reservoir	12 x 5 ml capacity, irradiation sterilized reservoirs for convenient sample loading on PCR arrays	338162

* 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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