EpiTect[®] Methyl II Complete PCR Array (94) Human Stress & Toxicity PathwayFinder

Cat. no. 335222 EAHS-3580ZE

For DNA methylation analysis using MethylScreen[™] technology

The Human Stress & Toxicity PathwayFinder EpiTect Methyl II Complete PCR Array profiles the promoter methylation status of a panel of 94 genes indicative of cellular stress responses and toxicity. Cells respond to a variety of exogenous insults by activating stress pathways, and epigenetic mechanisms regulate some of these responses. Multiple studies have found gene-specific methylation changes in stress response pathways upon in vitro exposure to stress or toxic compounds. However, the mechanistic details and functional consequences have yet to be discovered or confirmed by researchers. Profiling cellular or fresh tissue genomic DNA samples with these arrays may help correlate CpG island methylation status with biological phenotypes, such as the ability of cells to mount specific stress responses. This array profiles the methylation of a comprehensive set of genes important to acute and chronic stress and toxicological responses, including oxidative stress, inflammation, DNA damage, apoptosis, carcinogenesis, hypoxia, and the unfolded protein response. The results may also help provide further insights into the molecular mechanisms behind cellular stress responses. With a simple restriction enzyme digestion and real-time PCR, research studies can analyze the promoter methylation status of 94 different genes central to stress and toxicity 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 Complete 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 Complete PCR Array format for your instrument before starting the experiment.

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



Sample & Assay Technologies

Contents

Product	Contents	Cat. no.
EpiTect Methyl II Complete PCR Array (94) Format A	2 x set of 4 of 96-well plates, 12 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 Complete PCR Array (94) Format C	2 x set of 4 of 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 Complete PCR Array (94) Format D	2 x set of 4 of x 96-well plates, 12 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 Complete PCR Array (94) Format E	2, 12, or 24 x 384-well plates; 2, 12, or 24 sets of 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 Complete PCR Array (94) Format F	2 x set of 4 of 96-well plates; Optical Adhesive Film; for use with the following real-time cyclers: Roche [®] LightCycler [®] 480 (96-well block)	Varies
EpiTect Methyl II Complete PCR Array (94) Format G	2, 12, or 24 x 384-well plates; 2, 12, or 24 sets of 384EZLoad Covers; Optical Adhesive Film; for use with the following real-time cyclers: Roche LightCycler 480 (384-well block)	Varies

Gene table

		GenBank OR	Gene		
Position	Unigene	miRNA Accession	Symbol OR miRNA ID	Description	Gene Name
A01, A02, B01, B02	Hs.73722	NM_080649	APEX1	APEX nuclease (multifunctional DNA	APE, APE1, APEN, APEX,
				Activating transcription factor 4	CREB-2, CREB2, TAXREB67.
A03, A04, B03, B04	Hs.496487	NM_001675	ATF4	(tax-responsive enhancer element B67)	
A05, A06, B05, B06	Hs.367437	NM_000051	АТМ	Ataxia telangiectasia mutated	ATDC, ATE, DKFZp781A0353, MGC74674, TEL1, TELO1
A07, A08, B07, B08	Hs.271791	NM_001184	ATR	Ataxia telangiectasia and Rad3 related	FRP1, MEC1, SCKL, SCKL1
A09, A10, B09, B10	Hs.624291	NM_004324	BAX	BCL2-associated X protein	BCL2L4
A11, A12, B11, B12	Hs.516966	NM_138578	BCL2L1	BCL2-like 1	BCL-XL, S, BCL2L, BCLX, BCLXL, BCLXS, Bcl-X, DKFZp781P2092, bcl-xL, bcl-xS
A13, A14, B13, B14	Hs.144873	NM_004052	BNIP3	BCL2/adenovirus E1B 19kDa interacting protein 3	NIP3
A15, A16, B15, B16	Hs.194143	NM_007294	BRCA1	Breast cancer 1, early onset	BRCAI, BRCC1, BROVCA1, IRIS, PNCA4, PSCP, RNF53
A17, A18, B17, B18	Hs.515162	NM_004343	CALR	Calreticulin	CRT, FLJ26680, RO, SSA, cC1qR
A19, A20, B19, B20	Hs.699155	NM_001746	CANX	Calnexin	CNX, FLJ26570, IP90, P90
A21, A22, B21, B22	Hs.502302	NM_001752	CAT	Catalase	MGC138422, MGC138424
A23, A24. B23. B24	Hs.523852	NM 053056	CCND1	Cyclin D1	BCL1, D11S287E, PRAD1,
	He 70101		CCNG1	, Cyclin G1	U21B31
C01, C02, D01, D02	HS./ 9101	19M_004080	CCINGT	Copper chaperone for superoxide	CCING
C03, C04, D03, D04	Hs.502917	NM_005125	CCS	dismutase	MGC138260
C05, C06, D05, D06	Hs.370771	NM_000389	CDKN1A	Cyclin-dependent kinase inhibitor 1A (p21, Cip1)	MDA-6, P21, SDI1, WAF1, p21CIP1
C07, C08, D07, D08	Hs.517106	NM_005194	CEBPB	CCAAT/enhancer binding protein (C/EBP), beta	C, EBP-beta, CRP2, IL6DBP, LAP, MGC32080, NF-IL6, TCF5
C09, C10, D09, D10	Hs.24529	NM_001274	CHEK1	CHK1 checkpoint homolog (S. pombe)	CHK1
C11, C12, D11, D12	Hs.291363	NM_007194	CHEK2	CHK2 checkpoint homolog (S. pombe)	CDS1, CHK2, HuCds1, LFS2, PP1425, RAD53
C13, C14, D13, D14	Hs.522110	NM_006368	CREB3	CAMP responsive element binding protein 3	LUMAN, LZIP, MGC15333, MGC19782
C15, C16, D15, D16	Hs.695	NM_000100	CSTB	Cystatin B (stefin B)	CST6, EPM1, PME, STFB
C17, C18, D17, D18	Hs.513803	NM_000101	СҮВА	Cytochrome b-245, alpha polypeptide	p22-PHOX
C19, C20, D19, D20	Hs.72912	NM_000499	CYP1A1	Cytochrome P450, family 1, subfamily A, polypeptide 1	AHH, AHRR, CP11, CYP1, P1-450, P450-C, P450DX
C21, C22, D21, D22	Hs.728989	NM_004083	DDIT3	DNA-damage-inducible transcript 3	CEBPZ, CHOP, CHOP-10, CHOP10, GADD153, MGC4154
C23, C24, D23, D24	Hs.445203	NM_001539	DNAJA1	DnaJ (Hsp40) homolog, subfamily A, member 1	DJ-2, DjA1, HDJ2, HSDJ, HSJ2, HSPF4, NEDD7, hDJ-2
E01, E02, F01, F02	Hs.6790	NM_012328	DNAJB9	DnaJ (Hsp40) homolog, subfamily B, member 9	DKFZp564F1862, ERdj4, MDG-1, MDG1, MST049, MSTP049
E03, E04, F03, F04	Hs.438830	NM_013238	DNAJC15	DnaJ (Hsp40) homolog, subfamily C, member 15	DNAJD1, HSD18, MCJ
E05, E06, F05, F06	Hs.654393	NM_005225	E2F1	E2F transcription factor 1	E2F-1, RBAP1, RBBP3, RBP3
E07, E08, F07, F08	Hs.224616	NM_014674	EDEM1	ER degradation enhancer, mannosidase alpha-like 1	EDEM, FLJ51559, FLJ51560, KIAA0212
E09, E10, F09, F10	Hs.326035	NM_001964	EGR1	Early growth response 1	AT225, G0S30, KROX-24, NGFI-A, TIS8, ZIF-268, ZNF225
E11, E12, F11, F12	Hs.591589	NM_004836	EIF2AK3	Eukaryotic translation initiation factor 2-alpha kinase 3	DKFZp781H1925, PEK, PERK, WRS
E13, E14, F13, F14	Hs.435981	NM_001983	ERCC1	Excision repair cross-complementing rodent repair deficiency, complementation group 1 (includes overlapping antisense sequence)	COFS4, RAD10, UV20
E15, E16, F15, F16	Hs.80409	NM_001924	GADD45A	Growth arrest and DNA-damage-inducible, alpha	DDIT1, GADD45
				Growth arrest and	CR6, DDIT2,

	GenBank OR	Gene		
Uniaene	miRNA	Symbol OR	Description	Gene Name
	Accession	miRNIA ID		
Hc 9701		GADD45G	DNA damaga inducible gamma	GADD45aamma GPP17
HS.9701	NM_000703	GADD43G	DNA-damage-inducible, gamina	GDF-15, MIC-1, MIC1,
Hs.616962	NM_004864	GDF15	Growth differentiation factor 15	NAG-1, PDF, PLAB, PTGFB
Hs.76686	NM_000581	GPX1	Glutathione peroxidase 1	MGC88245
Hs.386793	NM_002084	GPX3	Glutathione peroxidase 3 (plasma)	GPx-P, GSHPx-3, GSHPx-P
Hs.433951	NM_002085	GPX4	Glutathione peroxidase 4 (phospholipid hydroperoxidase)	MCSP, PHGPx, snGPx, snPHGPx
Hs.43728	NM_015696	GPX7	Glutathione peroxidase 7	CL683, FLJ14777, GPX6, GPx-7, GSHPx-7, NPGPx
Hs.271510	NM_000637	GSR	Glutathione reductase	MGC78522
Hs.146393	NM_014685	HERPUD1	Homocysteine-inducible, endoplasmic reticulum stress-inducible, ubiquitin-like domain member 1	HERP, KIAA0025, Mif1, SUP
Hs.597216	NM_001530	HIF1A	Hypoxia inducible factor 1, alpha subunit (basic helix-loop-helix transcription factor)	HIF-1alpha, HIF1, HIF1-ALPHA, MOP1, PASD8, bHLHe78
Hs.517581	NM_002133	HMOX1	Heme oxygenase (decycling) 1	HO-1, HSP32, bK286B10
Hs.509736	NM_007355	HSP90AB1	Heat shock protein 90kDa alpha (cytosolic), class B member 1	D6S182, FLJ26984, HSP90-BETA, HSP90B, HSPC2, HSPCB
Hs.728810	NM_005345	HSPA1A	Heat shock 70kDa protein 1A	FLJ54303, FLJ54370, FLJ54392, FLJ54408, FLJ75127, HSP70-1, HSP70-1A, HSP70I, HSP72, HSPA1, HSPA1B
Hs.90093	NM_002154	HSPA4	Heat shock 70kDa protein 4	APG-2, HS24, P52, MGC131852, RY, hsp70, hsp70RY
He 716396	NM 005347	HSPA5	Heat shock 70kDa protein 5	BIP, FLJ26106, GRP78,
115.710370	14// 003347	1131 A3	(glucose-regulated protein, 78kDa)	MIF2
Hs.702021	NM_006597	HSPA8	Heat shock 70kDa protein 8	HSC54, HSC70, HSC71, HSP71, HSP73, HSPA10, LAP1, MGC131511, MGC29929, NIP71
Hs.1197	NM_002157	HSPE1	Heat shock 10kDa protein 1 (chaperonin 10)	CPN10, EPF, GROES, HSP10
Hs.36927	NM_006644	HSPH 1	Heat shock 105kDa/110kDa protein 1	DKFZp686M05240, HSP105, HSP105A, HSP105B, KIAA0201, NY-CO-25
Hs.152983	NM_004507	HUS1	HUS1 checkpoint homolog (S. pombe)	hHUS1
Hs.520819	NM_005542	INSIG1	Insulin induced gene 1	CL-6, CL6, MGC1405
Hs.75890	NM_003791	MBTPS1	Membrane-bound transcription factor peptidase, site 1	KIAA0091, MGC138711, MGC138712, PCSK8, S1P, SKI-1
Hs.484551	NM_002392	MDM2	Mdm2 p53 binding protein homolog (mouse)	HDMX, MGC5370, MGC71221, hdm2
Hs.407995	NM_002415	MIF	Macrophage migration inhibitory factor (glycosylation-inhibiting factor)	GIF, GLIF, MMIF
Hs.195364	NM_000249	MLH1	MutL homolog 1, colon cancer, nonpolyposis type 2 (E. coli)	COCA2, FCC2, HNPCC, HNPCC2, MGC5172, hMLH1
Hs.192649	NM_005590	MRE11A	MRE11 meiotic recombination 11 homolog A (S. cerevisiae)	ATLD, HNGS1, MRE11, MRE11B
Hs.597656	NM_000251	MSH2	MutS homolog 2, colon cancer, nonpolyposis type 1 (E. coli)	COCA1, FCC1, HNPCC, HNPCC1, LCFS2
Hs.647371	NM_005953	MT2A	Metallothionein 2A	MT2
Hs.73133	NM_005954	MT3	Metallothionein 3	GIF, GIFB, GRIF
Hs.654408	NM_003998	NFKB1	Nuclear factor of kappa light polypeptide gene enhancer in B-cells 1	DKFZp686C01211, EBP-1, KBF1, MGC54151, NF-kappa-B, NF-kappaB, NFKB-p105, NFKB-p50, NFkappaB, p105, p50
Hs.728886	NM_002592	PCNA	Proliferating cell nuclear antigen	MGC8367
Hs.591095	 NM_005313	PDIA3	Protein disulfide isomerase family A, member 3	ER60, ERp57, ERp60, ERp61, GRP57, GRP58, HsT17083, P58, PI-PLC
Hs.354056	NM_000941	POR	P450 (cytochrome) oxidoreductase	CPR, CYPOR, DKFZp686G04235, FLJ26468, P450R
	Unigene Hs.9701 Hs.9701 Hs.9701 Hs.616962 Hs.76686 Hs.386793 Hs.433951 Hs.433951 Hs.433951 Hs.43393 Hs.71510 Hs.146393 Hs.597216 Hs.597216 Hs.728810 Hs.728810 Hs.728810 Hs.702021 Hs.716396 Hs.702021 Hs.75890 Hs.484551 Hs.497995 Hs.192649 Hs.654408 Hs.591095 Hs.591095 Hs.354056 </td <td>GenBank OR miRNA Hs.9701 NM_006705 Hs.616962 NM_00285 Hs.76686 NM_002084 Hs.386793 NM_002085 Hs.433951 NM_002085 Hs.271510 NM_000637 Hs.597216 NM_001530 Hs.597216 NM_001530 Hs.597216 NM_003345 Hs.728810 NM_005345 Hs.728810 NM_005345 Hs.728810 NM_005542 Hs.702021 NM_005547 Hs.36927 NM_005542 Hs.36927 NM_003791 Hs.484551 NM_002392 Hs.752890 NM_002392 Hs.192649 NM_002415 Hs.192649 NM_002590 Hs.597656 NM_002591 Hs.654408 NM_003998</td> <td>GenBank OR Gene miRNA Symbol OR Hs.9701 NM_006705 GADD45G Hs.016962 NM_002864 GDF15 Hs.76686 NM_002084 GPX3 Hs.386793 NM_002085 GPX4 Hs.338571 NM_002085 GPX3 Hs.433951 NM_002085 GPX4 Hs.433728 NM_015696 GPX7 Hs.271510 NM_000637 GSR Hs.146393 NM_014685 HERPUD1 Hs.597216 NM_007355 HSP0AB1 Hs.597216 NM_002133 HMOX1 Hs.509736 NM_002154 HSPA1A Hs.728810 NM_005347 HSPA5 Hs.702021 NM_005347 HSPA5 Hs.716396 NM_002157 HSPA5 Hs.716396 NM_0023791 HSPA1A Hs.36927 NM_005542 INSIG1 Hs.19283 NM_002392 MDM2 Hs.484551 NM_002392 MDM2 Hs.497995 NM_002541 MIF Hs.4079</td> <td>Gene miRNA Symbol OR miRNA b Symbol OR miRNA b Hs.9701 NM_006705 GADD4SG DNA-damage-inducible, gamma Hs.9101 NM_006705 GADD4SG DNA-damage-inducible, gamma Hs.9101 NM_000581 GPX1 Glutathione peroxidasa [lplasma] Hs.386793 NM_002085 GPX4 Glutathione peroxidasa [lplasma] Hs.43728 NM_0015696 GPX7 Glutathione peroxidasa [lplasma] Hs.43728 NM_0015696 GPX7 Glutathione peroxidasa [lplasma] Hs.146393 NM_001500 GPX7 Glutathione reductese Hs.146393 NM_014685 HERPUD1 Homocystein-inducible, weightim-like endoplasmic Hs.597216 NM_001530 HIF1A Hypoxia inducible foctor 1, alpha estownt (basic heix-loop-heix transcription factor) Hs.517581 NM_002133 HMCX1 Here sock 70kDa protein 1A Hs.728810 NM_005347 HSPA1A Heat shock 70kDa protein 1A Hs.702021 NM_005542 HSPA1A Heat shock 70kDa protein 1 Hs.1127 NM_005542 HSPA1A Heat shock 70kDa protein 1</td>	GenBank OR miRNA Hs.9701 NM_006705 Hs.616962 NM_00285 Hs.76686 NM_002084 Hs.386793 NM_002085 Hs.433951 NM_002085 Hs.271510 NM_000637 Hs.597216 NM_001530 Hs.597216 NM_001530 Hs.597216 NM_003345 Hs.728810 NM_005345 Hs.728810 NM_005345 Hs.728810 NM_005542 Hs.702021 NM_005547 Hs.36927 NM_005542 Hs.36927 NM_003791 Hs.484551 NM_002392 Hs.752890 NM_002392 Hs.192649 NM_002415 Hs.192649 NM_002590 Hs.597656 NM_002591 Hs.654408 NM_003998	GenBank OR Gene miRNA Symbol OR Hs.9701 NM_006705 GADD45G Hs.016962 NM_002864 GDF15 Hs.76686 NM_002084 GPX3 Hs.386793 NM_002085 GPX4 Hs.338571 NM_002085 GPX3 Hs.433951 NM_002085 GPX4 Hs.433728 NM_015696 GPX7 Hs.271510 NM_000637 GSR Hs.146393 NM_014685 HERPUD1 Hs.597216 NM_007355 HSP0AB1 Hs.597216 NM_002133 HMOX1 Hs.509736 NM_002154 HSPA1A Hs.728810 NM_005347 HSPA5 Hs.702021 NM_005347 HSPA5 Hs.716396 NM_002157 HSPA5 Hs.716396 NM_0023791 HSPA1A Hs.36927 NM_005542 INSIG1 Hs.19283 NM_002392 MDM2 Hs.484551 NM_002392 MDM2 Hs.497995 NM_002541 MIF Hs.4079	Gene miRNA Symbol OR miRNA b Symbol OR miRNA b Hs.9701 NM_006705 GADD4SG DNA-damage-inducible, gamma Hs.9101 NM_006705 GADD4SG DNA-damage-inducible, gamma Hs.9101 NM_000581 GPX1 Glutathione peroxidasa [lplasma] Hs.386793 NM_002085 GPX4 Glutathione peroxidasa [lplasma] Hs.43728 NM_0015696 GPX7 Glutathione peroxidasa [lplasma] Hs.43728 NM_0015696 GPX7 Glutathione peroxidasa [lplasma] Hs.146393 NM_001500 GPX7 Glutathione reductese Hs.146393 NM_014685 HERPUD1 Homocystein-inducible, weightim-like endoplasmic Hs.597216 NM_001530 HIF1A Hypoxia inducible foctor 1, alpha estownt (basic heix-loop-heix transcription factor) Hs.517581 NM_002133 HMCX1 Here sock 70kDa protein 1A Hs.728810 NM_005347 HSPA1A Heat shock 70kDa protein 1A Hs.702021 NM_005542 HSPA1A Heat shock 70kDa protein 1 Hs.1127 NM_005542 HSPA1A Heat shock 70kDa protein 1

		GenBank OR	Gene		
Position	Unigene	miRNA	Symbol OR	Description	Gene Name
		Accession	miRNA ID		
					MSP23, NKEFA, PAG,
K07, K08, L07, L08	Hs.180909	NM_002574	PRDX1	Peroxiredoxin 1	PAGA, PAGB, PRX1, PRXI,
					TDPX2
K09 K10 109 110	He /32121	NM 005809	PRU32	Peroviredovin 2	MGC4104, NKEFB, PRP,
K07, K10, L07, L10	115.452121	14/4_003807	TRDAZ		TSA
					AOP-1, AOP1, MER5,
K11, K12, L11, L12	Hs.523302	NM_006793	PRDX3	Peroxiredoxin 3	MGC104387, MGC24293,
					PRO1/48, SP-22
					MGC117264,
K13, K14, L13, L14	Hs.502823	NM_181652	PRDX5	Peroxiredoxin 5	MGC142283,
					MGC142285, PLP, PMP20,
					1-Cvs AOP2 KIAA0106
K15, K16, L15, L16	Hs.120	NM_004905	PRDX6	Peroxiredoxin 6	MGC46173, NSGPx, PRX,
					aiPLA2, p29
	11- 401 400		PPKDC	Protein kinase, DNA-activated, catalytic	DNA-PKcs, DNAPK,
NI/, NIO, LI/, LIO	ns.491062	NM_008904	PRADC	polypeptide	XRCC7, p350
				Prostaglandin-endoperoxide synthase 2	COX-2, COX2, GRIPGHS,
K19, K20, L19, L20	Hs.196384	NM_000963	PTGS2	(prostaglandin G/H synthase and	PGG, HS, PGHS-2, PHS-2,
K01 K00 101 100	Hc 521870	NM 002852	PADI	cyclooxygenase)	hCox-2
N21, N22, L21, L22	113.331077	14//_002033		IOLD I Homolog (S. pombe)	CCYC, FLJ41520,
K23, K24, L23, L24	Hs.16184	NM_002873	RAD17	RAD17 homolog (S. pombe)	HRAD17, R24L, RAD17SP,
401 402 NO1 NO2	11- (100 / 7	NIM 005052	BADOOA		RAD24
M01, M02, N01, N02 M03, M04, N03, N04	Hs.655835	NM 005732	RAD23A RAD50	RAD23 nomolog A (S. cereviside) RAD50 homolog (S. cereviside)	NBSLD, RAD502, hRad50
					BRCC5, HRAD51,
M05, M06, N05, N06	Hs.631709	NM_002875	RAD51	RAD51 homolog (S. cerevisiae)	HsRad51, HsT16930,
M07 M08 N07 N08	He 655354	NM 004584	PADQA	RAD9 homolog A (S. pombe)	RADSTA, RECA
M09, M10, N09, N10	Hs.654583	NM_001024809	RARA	Retinoic acid receptor, alpha	NR1B1, RAR
M11, M12, N11, N12	Hs.128856	NM 182826	SCARA3	Scavenger receptor class A, member 3	APC7, CSR, CSR1, MSLR1,
		_			MSRL1
					DXS423E, KIAA0178,
M13, M14, N13, N14	Hs.211602	NM_006306	SMC1A	Structural maintenance of chromosomes	MGC138332, SB1.8,
					SMC1, SMC1L1,
	11 440014	NUL 000454	6001		ALS, ALS1, IPOA, SOD,
M15, M16, N15, N16	Hs.443914	NM_000454	3001	Superoxide dismutase 1, soluble	hSod1, homodimer
M17, M18, N17, N18	Hs.487046	NM_000636	SOD2	Superoxide dismutase 2, mitochondrial	IPOB, MNSOD, MVCD6
M19, M20, N19, N20	Hs.516830	NM 080725	SRXN1	Sulfiredoxin 1	Npn3, SRX1, YKL086W,
		-			dJ850E9.2
M21, M22, N21, N22	Hs.715498	NM_172230	SYVN1	Synovial apoptosis inhibitor 1, synoviolin	HRD1, KIAA1810,
					FLJ92943, LFS1, P53,
M23, M24, N23, N24	Hs.654481	NM_000546	TP53	Tumor protein p53	TRP53
O01, O02, P01, P02	Hs.443430	NM_006440	TXNRD2	Thioredoxin reductase 2	SELZ, TR, TR-BETA, TR3,
003. 004. P03. P04	Hs.529420	NM 182688	UBE2G2	Ubiquitin-conjugating enzyme E2G 2	UBC7
					DGU, DKFZp781L1143,
O05, O06, P05, P06	Hs.191334	NM_003362	UNG	Uracil-DNA glycosylase	HIGM4, UDG, UNG1,
					UNG15, UNG2 IBMPED_MGC131997
O07, O08, P07, P08	Hs.529782	NM_007126	VCP	Valosin containing protein	MGC148092, MGC8560,
		_			TERA, p97
O09, O10, P09, P10	Hs.73793	NM_003376	VEGFA	Vascular endothelial growth factor A	MGC70609, MVCD1,
O11, O12, P11, P12	Hs.437638	NM_005080	XBP1	X-box binding protein 1	TREB5, XBP2
O13, O14, P13, P14	Hs.475538	NM 004628	XPC	Xeroderma pigmentosum,	RAD4, XP3, XPCC
				complementation group C	
O15, O16, P15, P16	Hs.98493	NM_006297	XRCC1	repair in Chinese hamster cells 1	RCC
017. 018 P17 P18	Hs.647093	NM 005431	XRCC2	X-ray repair complementing defective	DKF7n781P0919
	13.04/0/3		7.1.002	repair in Chinese hamster cells 2	
O19, O20, P19, P20	Hs.292493	NM_001469	XRCC6	A-ray repair complementing detective repair in Chinese hamster cells 6	KU70, ML8, TLAA

Position	Unigene	GenBank OR miRNA Accession	Gene Symbol OR miRNA ID	Description	Gene Name
O21, O22, P21, P22	N/A	SA_00148	EP_SEC	SEC-sensitive enzyme control assay	SEC
O23, O24, P23, P24	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
RT² 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 Signature PCR Array (22)	For methylation analysis of 22 genes in a 96-well or 384-well plate format	335212
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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