

Table S1. A list of genes included on RT² Profiler™ PCR Array Human DNA Damage Signaling Pathway (PAHS-029Z, Qiagen).

Unigene	Refseq	Symbol	Description	RT2 Catalog
Hs.431048	NM_005157	<i>ABL1</i>	C-abl oncogene 1, non-receptor tyrosine kinase	PPH00087E
Hs.73722	NM_080649	<i>APEX1</i>	APEX nuclease (multifunctional DNA repair enzyme) 1	PPH02201A
Hs.367437	NM_000051	<i>ATM</i>	Ataxia telangiectasia mutated	PPH00325C
Hs.271791	NM_001184	<i>ATR</i>	Ataxia telangiectasia and Rad3 related	PPH01318B
Hs.694840	NM_032166	<i>ATRIP</i>	ATR interacting protein	PPH66805A
Hs.533526	NM_000489	<i>ATRX</i>	Alpha thalassemia/mental retardation syndrome X-linked	PPH00470F
Hs.591642	NM_000465	<i>BARD1</i>	BRCA1 associated RING domain 1	PPH09451A
Hs.624291	NM_004324	<i>BAX</i>	BCL2-associated X protein	PPH00078B
Hs.467020	NM_014417	<i>BBC3</i>	BCL2 binding component 3	PPH02204C
Hs.725208	NM_000057	<i>BLM</i>	Bloom syndrome, RecQ helicase-like	PPH02711B
Hs.194143	NM_007294	<i>BRCA1</i>	Breast cancer 1, early onset	PPH00322F
Hs.128903	NM_032043	<i>BRIP1</i>	BRCA1 interacting protein C-terminal helicase 1	PPH10375A
Hs.437705	NM_001789	<i>CDC25A</i>	Cell division cycle 25 homolog A (<i>S. pombe</i>)	PPH00930A
Hs.656	NM_001790	<i>CDC25C</i>	Cell division cycle 25 homolog C (<i>S. pombe</i>)	PPH02198F
Hs.184298	NM_001799	<i>CDK7</i>	Cyclin-dependent kinase 7	PPH00935E
Hs.370771	NM_000389	<i>CDKN1A</i>	Cyclin-dependent kinase inhibitor 1A (p21, Cip1)	PPH00211E
Hs.24529	NM_001274	<i>CHEK1</i>	CHK1 checkpoint homolog (<i>S. pombe</i>)	PPH00940C
Hs.291363	NM_007194	<i>CHEK2</i>	CHK2 checkpoint homolog (<i>S. pombe</i>)	PPH00921B
Hs.715556	NM_006384	<i>CIB1</i>	Calcium and integrin binding 1 (calmyrin)	PPH12320C
Hs.151573	NM_004075	<i>CRY1</i>	Cryptochrome 1 (photolyase-like)	PPH06231B
Hs.82201	NM_001896	<i>CSNK2A2</i>	Casein kinase 2, alpha prime polypeptide	PPH02197F
Hs.290758	NM_001923	<i>DDB1</i>	Damage-specific DNA binding protein 1, 127kDa	PPH01515A
Hs.700338	NM_000107	<i>DDB2</i>	Damage-specific DNA binding protein 2, 48kDa	PPH01726A
Hs.505777	NM_004083	<i>DDIT3</i>	DNA-damage-inducible transcript 3	PPH00310A
Hs.435981	NM_001983	<i>ERCC1</i>	Excision repair cross-complementing rodent repair deficiency, complementation group 1 (includes overlapping antisense sequence)	PPH01539A
Hs.487294	NM_000400	<i>ERCC2</i>	Excision repair cross-complementing rodent repair deficiency, complementation group 2	PPH01550C
Hs.498248	NM_130398	<i>EXO1</i>	Exonuclease 1	PPH02715A
Hs.744083	NM_000135	<i>FANCA</i>	Fanconi anemia, complementation group A	PPH15968E

Hs.208388	NM_033084	<i>FANCD2</i>	Fanconi anemia, complementation group D2	PPH14413A
Hs.591084	NM_004629	<i>FANCG</i>	Fanconi anemia, complementation group G	PPH20387A
Hs.409065	NM_004111	<i>FEN1</i>	Flap structure-specific endonuclease 1	PPH00502B
Hs.80409	NM_001924	<i>GADD45A</i>	Growth arrest and DNA-damage-inducible, alpha	PPH00148B
Hs.9701	NM_006705	<i>GADD45G</i>	Growth arrest and DNA-damage-inducible, gamma	PPH02207A
Hs.477879	NM_002105	<i>H2AFX</i>	H2A histone family, member X	PPH12636B
Hs.152983	NM_004507	<i>HUS1</i>	HUS1 checkpoint homolog (S. pombe)	PPH00922B
Hs.1770	NM_000234	<i>LIG1</i>	Ligase I, DNA, ATP-dependent	PPH02094A
Hs.432642	NM_002969	<i>MAPK12</i>	Mitogen-activated protein kinase 12	PPH01779A
Hs.35947	NM_003925	<i>MBD4</i>	Methyl-CpG binding domain protein 4	PPH02709A
Hs.593807	NM_024596	<i>MCPH1</i>	Microcephalin 1	PPH14515B
Hs.653495	NM_014641	<i>MDC1</i>	Mediator of DNA-damage checkpoint 1	PPH20213B
Hs.195364	NM_000249	<i>MLH1</i>	MutL homolog 1, colon cancer, nonpolyposis type 2 (E. coli)	PPH00196F
Hs.436650	NM_014381	<i>MLH3</i>	MutL homolog 3 (E. coli)	PPH02700A
Hs.459596	NM_002434	<i>MPG</i>	N-methylpurine-DNA glycosylase	PPH02102A
Hs.192649	NM_005590	<i>MRE11A</i>	MRE11 meiotic recombination 11 homolog A (S. cerevisiae)	PPH01097C
Hs.597656	NM_000251	<i>MSH2</i>	MutS homolog 2, colon cancer, nonpolyposis type 1 (E. coli)	PPH00197E
Hs.648635	NM_002439	<i>MSH3</i>	MutS homolog 3 (E. coli)	PPH02195A
Hs.492208	NM_002485	<i>NBN</i>	Nibrin	PPH00946C
Hs.66196	NM_002528	<i>NTHL1</i>	Nth endonuclease III-like 1 (E. coli)	PPH02720A
Hs.380271	NM_002542	<i>OGG1</i>	8-oxoguanine DNA glycosylase	PPH02103A
Hs.177766	NM_001618	<i>PARP1</i>	Poly (ADP-ribose) polymerase 1	PPH00686B
Hs.147433	NM_182649	<i>PCNA</i>	Proliferating cell nuclear antigen	PPH00216B
Hs.111749	NM_000534	<i>PMS1</i>	PMS1 postmeiotic segregation increased 1 (S. cerevisiae)	PPH02155B
Hs.715590	NM_000535	<i>PMS2</i>	PMS2 postmeiotic segregation increased 2 (S. cerevisiae)	PPH02095E
Hs.78016	NM_007254	<i>PNKP</i>	Polynucleotide kinase 3'-phosphatase	PPH02725A
Hs.286073	NM_003620	<i>PPM1D</i>	Protein phosphatase, Mg ²⁺ /Mn ²⁺ dependent, 1D	PPH02151A
Hs.631593	NM_014330	<i>PPP1R15A</i>	Protein phosphatase 1, regulatory (inhibitor) subunit 15A	PPH02081E
Hs.491682	NM_006904	<i>PRKDC</i>	Protein kinase, DNA-activated, catalytic polypeptide	PPH01309C
Hs.38114	NM_002853	<i>RAD1</i>	RAD1 homolog (S. pombe)	PPH00741F
Hs.16184	NM_002873	<i>RAD17</i>	RAD17 homolog (S. pombe)	PPH00929F
Hs.375684	NM_020165	<i>RAD18</i>	RAD18 homolog (S. cerevisiae)	PPH02740A
Hs.81848	NM_006265	<i>RAD21</i>	RAD21 homolog (S. pombe)	PPH10216A

Hs.633509	NM_005732	<i>RAD50</i>	RAD50 homolog (<i>S. cerevisiae</i>)	PPH00956B
Hs.631709	NM_002875	<i>RAD51</i>	RAD51 homolog (<i>S. cerevisiae</i>)	PPH00942F
Hs.172587	NM_133509	<i>RAD51B</i>	RAD51 homolog B (<i>S. cerevisiae</i>)	PPH02654B
Hs.655354	NM_004584	<i>RAD9A</i>	RAD9 homolog A (<i>S. pombe</i>)	PPH00944C
Hs.546282	NM_002894	<i>RBBP8</i>	Retinoblastoma binding protein 8	PPH00954F
Hs.443077	NM_016316	<i>REV1</i>	REV1 homolog (<i>S. cerevisiae</i>)	PPH21080A
Hs.250648	NM_152617	<i>RNF168</i>	Ring finger protein 168	PPH14759A
Hs.485278	NM_183078	<i>RNF8</i>	Ring finger protein 8	PPH08534A
Hs.461925	NM_002945	<i>RPA1</i>	Replication protein A1, 70kDa	PPH02730A
Hs.369779	NM_012238	<i>SIRT1</i>	Sirtuin 1	PPH02188A
Hs.211602	NM_006306	<i>SMC1A</i>	Structural maintenance of chromosomes 1A	PPH14489A
Hs.81424	NM_003352	<i>SUMO1</i>	SMT3 suppressor of mif two 3 homolog 1 (<i>S. cerevisiae</i>)	PPH00973F
Hs.593379	NM_007027	<i>TOPBP1</i>	Topoisomerase (DNA) II binding protein 1	PPH10470A
Hs.437460	NM_000546	<i>TP53</i>	Tumor protein p53	PPH00213F
Hs.440968	NM_005657	<i>TP53BP1</i>	Tumor protein p53 binding protein 1	PPH02165A
Hs.192132	NM_005427	<i>TP73</i>	Tumor protein p73	PPH00725A
Hs.191334	NM_003362	<i>UNG</i>	Uracil-DNA glycosylase	PPH01727E
Hs.654364	NM_000380	<i>XPA</i>	Xeroderma pigmentosum, complementation group A	PPH01524C
Hs.475538	NM_004628	<i>XPC</i>	Xeroderma pigmentosum, complementation group C	PPH01536F
Hs.98493	NM_006297	<i>XRCC1</i>	X-ray repair complementing defective repair in Chinese hamster cells 1	PPH01741A
Hs.647093	NM_005431	<i>XRCC2</i>	X-ray repair complementing defective repair in Chinese hamster cells 2	PPH01694A
Hs.592325	NM_005432	<i>XRCC3</i>	X-ray repair complementing defective repair in Chinese hamster cells 3	PPH02208A
Hs.292493	NM_001469	<i>XRCC6</i>	X-ray repair complementing defective repair in Chinese hamster cells 6	PPH02175A
Hs.520640	NM_001101	<i>ACTB</i>	Actin, beta	PPH00073G
Hs.534255	NM_004048	<i>B2M</i>	Beta-2-microglobulin	PPH01094E
Hs.592355	NM_002046	<i>GAPDH</i>	Glyceraldehyde-3-phosphate dehydrogenase	PPH00150F
Hs.412707	NM_000194	<i>HPRT1</i>	Hypoxanthine phosphoribosyltransferase 1	PPH01018C
Hs.546285	NM_001002	<i>RPLP0</i>	Ribosomal protein, large, P0	PPH21138F
N/A	SA_00105	HGDC	Human Genomic DNA Contamination	
N/A	SA_00104	RTC	Reverse Transcription Control	PPX63340A
N/A	SA_00104	RTC	Reverse Transcription Control	PPX63340A
N/A	SA_00104	RTC	Reverse Transcription Control	PPX63340A