

## List of Abbreviations

<b>4-ABP</b>	4-aminobiphenyl	<b>CISNET</b>	Cancer Intervention and Surveillance Modeling Network
<b>AAP</b>	American Academy of Pediatrics	<b>CL/P</b>	cleft lip with or without cleft palate
<b>AAT</b>	$\alpha$ -1 antitrypsin	<b>CLUE II</b>	Campaign Against Cancer and Heart Disease
<b>ACE</b>	acute coronary events	<b>cm</b>	centimeter
<b>ACOG</b>	American Congress of Obstetricians and Gynecologists	<b>CMS</b>	Centers for Medicare & Medicaid Services
<b>ACS</b>	American Cancer Society	<b>CNS</b>	central nervous system
<b>ADHD</b>	attention deficit hyperactivity disorder	<b>CNV</b>	choroidal neovascularization
<b>AMA</b>	American Medical Association	<b>CO</b>	carbon monoxide
<b>AMD</b>	age-related macular degeneration	<b>COLD</b>	chronic obstructive lung disease
<b>AMI</b>	acute myocardial infarction	<b>COMMIT</b>	Community Intervention Trial for Smoking Cessation
<b>anti-CCP</b>	anti-cyclic citrullinated peptide	<b>COPD</b>	chronic obstructive pulmonary disease
<b>anti-HCV</b>	antibodies to hepatitis C virus	<b>COSMIC</b>	Catalogue of Somatic Mutations in Cancer
<b>ANR</b>	Americans for Nonsmokers' Rights	<b>CP</b>	cleft palate
<b>ANRF</b>	American Nonsmokers' Rights Foundation	<b>CPP</b>	Collaborative Perinatal Project
<b>AOR</b>	adjusted odds ratio	<b>CPS</b>	Cancer Prevention Study
<b>ARIC</b>	Atherosclerosis Risk in Communities	<b>CRP</b>	C-reactive protein
<b>ASSIST</b>	American Stop Smoking Intervention Study	<b>CSE</b>	cigarette smoke extract
<b>ATS</b>	American Thoracic Society	<b>CT</b>	computed tomography
<b>B[a]P</b>	benzo[a]pyrene	<b>CTR</b>	The Council for Tobacco Research—U.S.A., Inc.
<b>BACH</b>	Boston Area Community Health survey	<b>CVD</b>	cardiovascular disease
<b>BALT</b>	bronchus-associated lymphoid tissue	<b>CYP</b>	cytochrome P-450
<b>BAT</b>	British American Tobacco	<b>DALYs</b>	disability-adjusted life years
<b>BCFR</b>	Breast Cancer Family Registry	<b>DAMPs</b>	damage-associated molecular patterns
<b>BMI</b>	body mass index	<b>DFS</b>	decayed/filled tooth surface
<b>Breg</b>	B regulatory cells	<b>DFT</b>	decayed/filled permanent teeth
<b>BRFSS</b>	Behavioral Risk Factor Surveillance System	<b>dL</b>	deciliter
<b>B&amp;W</b>	Brown & Williamson Tobacco Co.	<b>DMF</b>	decayed/missing due to caries/filled
<b>Cal/EPA</b>	California Environmental Protection Agency	<b>DMFS</b>	decayed/missing due to caries/filled tooth surface
<b>CBCL</b>	child behavior checklist	<b>DMFT</b>	decayed/missing due to caries/filled permanent teeth
<b>CBO</b>	Congressional Budget Office	<b>DOD</b>	U.S. Department of Defense
<b>CC16</b>	Clara cell secretory protein 16	<b>DOJ</b>	U.S. Department of Justice
<b>CDC</b>	Centers for Disease Control and Prevention	<b>DTPs</b>	dissolvable tobacco products
<b>CF</b>	cystic fibrosis	<b>E1</b>	estrone
<b>CFTR</b>	cystic fibrosis transmembrane conductance regulator	<b>E2</b>	estradiol
<b>CHARGE</b>	Cohorts for Heart and Aging Research in Genomic Epidemiology	<b>E3</b>	estriol
<b>CHD</b>	coronary heart disease	<b>ECLIPSE</b>	Evaluation of COPD Longitudinally to Identify Predictive Surrogate Endpoints
<b>CHF</b>	congestive heart failure		
<b>CI</b>	confidence interval		

<b>ED</b>	erectile dysfunction	<b>HMGB1</b>	high mobility group box 1
<b>EGRCIBD-Japan</b>	Epidemiology Group of the Research Committee of Inflammatory Bowel Disease in Japan	<b>HMOX</b>	heme oxygenase
<b>EHR</b>	electronic health record	<b>HPHCs</b>	harmful and potentially harmful constituents [in tobacco products]
<b>ENDS</b>	electronic nicotine delivery system	<b>HPV</b>	human papillomavirus
<b>EP</b>	ectopic pregnancy	<b>HR</b>	hazard ratio
<b>EPA</b>	U.S. Environmental Protection Agency	<b>HRS</b>	Health and Retirement Study
<b>EPIC</b>	European Prospective Investigation into Cancer and Nutrition	<b>HRT</b>	hormone replacement therapy
<b>ER</b>	estrogen receptor	<b>HSPs</b>	heat shock proteins
<b>ETS</b>	environmental tobacco smoke	<b>IARC</b>	International Agency for Research on Cancer
<b>FCA</b>	Framework Convention Alliance	<b>IBD</b>	inflammatory bowel disease
<b>FCC</b>	Federal Communications Commission	<b>ICD</b>	<i>International Classification of Diseases</i>
<b>FCTC</b>	Framework Convention on Tobacco Control	<b>IFN</b>	interferon
<b>FDA</b>	U.S. Food and Drug Administration	<b>IFN<math>\gamma</math></b>	interferon gamma
<b>FEV<sub>1</sub></b>	forced expiratory volume in 1 second	<b>Ig</b>	immunoglobulin
<b>FMD</b>	flow-mediated dilation	<b>IgG</b>	immunoglobulin G
<b>FOXP3</b>	forkhead box PC	<b>IHD</b>	ischemic heart disease
<b>FTC</b>	U.S. Federal Trade Commission	<b>IIEF</b>	International Index of Erectile Function
<b>FVC</b>	forced vital capacity	<b>IL</b>	interleukin
<b>g</b>	gram	<b>IMPACT</b>	Initiatives to Mobilize for the Prevention and Control of Tobacco Use Program
<b>GA</b>	geographic atrophy	<b>IOM</b>	Institute of Medicine
<b>GABA</b>	gamma-aminobutyric acid	<b>IPF</b>	idiopathic pulmonary fibrosis
<b>GAO</b>	U.S. Government Accounting Office	<b>IQ</b>	intelligence quotient
<b>GATS</b>	Global Adult Tobacco Survey	<b>IUD</b>	intrauterine device
<b>GENICA</b>	Gene Environment Interaction and Breast Cancer	<b>IUGR</b>	intrauterine growth retardation
<b>GenKOLS</b>	Genetics of Chronic Obstructive Lung Disease	<b>JNK</b>	c-Jun N-terminal kinase
<b>GINA</b>	Global Initiative for Asthma	<b>LD50</b>	dose causing 50% lethality
<b>GM-CSF</b>	granulocyte macrophage colony-stimulating factor	<b>LMIC</b>	low- and middle-income countries
<b>GOLD</b>	Global Initiative for Chronic Obstructive Lung Disease	<b>LPS</b>	lipopolysaccharide
<b>GSP</b>	Global Smokefree Partnership	<b><i>M. tuberculosis</i></b>	<i>Mycobacterium tuberculosis</i>
<b>GST</b>	glutathione S-transferase	<b>mcg</b>	micrograms
<b>GWAS</b>	genome-wide association studies	<b>MEPS</b>	Medical Expenditure Panel Survey
<b>HBV</b>	hepatitis B virus	<b>MeSH</b>	Medical Subject Headings
<b>HBsAg</b>	HBV surface antigen	<b>mg</b>	milligram
<b>HCC</b>	hepatocellularcarcinoma	<b>MHC</b>	major histocompatibility complex
<b>HCV</b>	hepatitis C virus	<b>MI</b>	myocardial infarction
<b>Hg</b>	mercury	<b>mL</b>	milliliter
<b>HIP</b>	Health Insurance Plan	<b>mm</b>	millimeter
<b>HITECH</b>	<i>Health Information Technology Economic and Clinical Health Act</i>	<b>mmol</b>	millimole
<b>HIV/AIDS</b>	human immunodeficiency virus infection/acquired immunodeficiency syndrome	<b>mmol/L</b>	millimoles per liter
		<b>MMP</b>	matrix metalloproteinase
		<b>MRFIT</b>	Multiple Risk Factor Intervention Trial
		<b>mRNA</b>	messenger RNA
		<b>MSA</b>	Master Settlement Agreement
		<b>MyD88</b>	myeloid differentiation factor 88

<b>nAChR</b>	nicotinic acetylcholine receptor	<b>PAI-1</b>	plasminogen activator inhibitor-1
<b>NAQC</b>	North American Quitline Consortium	<b>PAMPs</b>	pathogen-associated molecular patterns
<b>NAT</b>	<i>N</i> -acetyltransferase	<b>Pap</b>	Papanicolaou
<b>NBDPS</b>	National Birth Defects Prevention Study	<b>PARC</b>	pulmonary-and activation-regulated chemokine
<b>NCHS</b>	National Center for Health Statistics	<b>PBI</b>	penile-brachial index
<b>NCI</b>	National Cancer Institute	<b>PCR</b>	polymerase chain reaction
<b>NE</b>	neutrophil elastase	<b>PDAY</b>	Pathobiological Determinants of Atherosclerosis in Youth study
<b>NETT</b>	National Emphysema Treatment Trial	<b>PHS</b>	U.S. Public Health Service
<b>NF-κB</b>	nuclear factor-kappa B	<b>PID</b>	pelvic inflammatory disease
<b>NFPA</b>	National Fire Protection Association	<b>PM<sub>2.5</sub></b>	particulate matter
<b>ng</b>	nanogram	<b>PR</b>	progesterone receptors
<b>NHANES</b>	National Health and Nutrition Examination Survey	<b>PRAMS</b>	Pregnancy Risk Assessment Monitoring System
<b>NHDS</b>	National Hospital Discharge Survey	<b>PRRs</b>	pattern recognition receptors
<b>NHIS</b>	National Health Interview Survey	<b>PSA</b>	prostate-specific antigen
<b>NHLBI</b>	National Heart, Lung, and Blood Institute	<b>PSAM</b>	probability of smoking-attributable mortality
<b>NHS</b>	Nurses' Health Study	<b>PVFE</b>	present value of future earnings
<b>NIDA</b>	National Institute on Drug Abuse	<b>QALYs</b>	quality-adjusted life years
<b>NIH</b>	National Institutes of Health	<b>RA</b>	rheumatoid arthritis
<b>NK</b>	natural killer	<b>RAI</b>	Reynolds American, Inc.
<b>NKG2D</b>	NK group 2D	<b>RCP</b>	Royal College of Physicians
<b>NKT</b>	natural killer T	<b>RCT</b>	randomized clinical trial
<b>NNAL</b>	4-(methylnitrosamino)-1-(3-pyridyl)-1-butanol	<b>RDFS</b>	root-surface caries decayed/filled tooth surface
<b>NNK</b>	4-(methylnitrosamino)-1-(3-pyridyl)-1-butanone	<b>RDS</b>	root-surface caries decayed tooth surface
<b>NNN</b>	<i>N</i> '-nitrosonor nicotine	<b>RF</b>	rheumatoid factor
<b>NO</b>	nitric oxide	<b>RICO</b>	<i>Racketeer Influenced and Corrupt Organizations Act</i>
<b>NP</b>	nicotine polacrilex gum	<b>RJR</b>	R.J. Reynolds Tobacco Company
<b>NPCR</b>	National Program of Cancer Registries	<b>ROS</b>	reactive-oxygen species
<b>NPT</b>	nocturnal penile tumescence	<b>RPE</b>	retinal pigment epithelium
<b>NPTR</b>	nocturnal penile tumescence and rigidity	<b>RR</b>	relative risk
<b>NRT</b>	nicotine replacement therapy	<b>RSV</b>	respiratory syncytial virus
<b>NSAIDs</b>	nonsteroidal anti-inflammatory drugs	<b>RT</b>	response time
<b>NSCLC</b>	non-small-cell lung cancer	<b><i>S. pneumonia</i></b>	<i>Streptococcus pneumoniae</i>
<b>NSDUH</b>	National Survey on Drug Use and Health	<b>SAB</b>	spontaneous abortion
<b>NTHi</b>	nontypeable <i>Haemophilus influenza</i>	<b>SAF</b>	smoking-attributable fraction
<b>NV</b>	neovascular	<b>SAM</b>	smoking-attributable mortality
<b>NYTS</b>	National Youth Tobacco Survey	<b>SAMHSA</b>	Substance Abuse and Mental Health Services Administration
<b>ODD</b>	oppositional defiant disorder	<b>SAMMEC</b>	Smoking-Attributable Mortality, Morbidity, and Economic Costs
<b>OR</b>	odds ratio	<b>SCD</b>	sudden coronary death
<b><i>P. aeruginosa</i></b>	<i>Pseudomonas aeruginosa</i>	<b>SCE</b>	sister chromatid exchange
<b>PACT</b>	<i>Prevent All Cigarette Trafficking Act</i>	<b>SEER</b>	Surveillance, Epidemiology, and End Results
<b>PAD</b>	peripheral arterial disease		
<b>PAF</b>	population-attributable fraction		
<b>PAH</b>	polycyclic aromatic hydrocarbon		

<b>SES</b>	socioeconomic status	<b>TRPA1</b>	transient receptor potential cation channel, subfamily A, member 1
<b>SF-12</b>	Short Form 12	<b>TST</b>	tuberculin skin test
<b>SF-36</b>	Short Form 36	<b>UGT</b>	uridine-5'-disphosphate-glucuronosyltransferase
<b>sFlt-1</b>	soluble fms-like tyrosine kinase-1	<b>UICC</b>	Union for International Cancer Control
<b>S/G<sub>2</sub>/M</b>	synthesis/gap <sub>2</sub> /mitosis	<b>UN</b>	United Nations
<b>SIDS</b>	sudden infant death syndrome	<b>UPRs</b>	unfolded protein responses
<b>SLE</b>	systemic lupus erythematosus	<b>USDHEW</b>	U.S. Department of Health, Education, and Welfare
<b>SLEDAI</b>	Systemic Lupus Erythematosus Disease Activity Index	<b>USDHHS</b>	U.S. Department of Health and Human Services
<b>SNP</b>	single nucleotide polymorphism	<b>USEPA</b>	U.S. Environmental Protection Agency
<b>SOD2</b>	superoxide dismutase 2	<b>USGAO</b>	U.S. General Accounting Office
<b>STI</b>	sexually transmitted infection	<b>USPSTF</b>	U.S. Preventive Services Task Force
<b>SULT</b>	sulfotransferase	<b>USRTC</b>	U.S. Radiologic Technologist Cohort
<b>TB</b>	tuberculosis	<b>VA</b>	U.S. Department of Veterans Affairs
<b>TCDD</b>	tetrachlorodibenzo-p-dioxin	<b>VDJ</b>	variable, diversity, and joining gene segments recombination
<b>TCR</b>	T cell receptor	<b>WHI</b>	Women's Health Initiative
<b>Th cell</b>	T helper cell	<b>WHO</b>	World Health Organization
<b>TI</b>	The Tobacco Institute, Inc.	<b>WTO</b>	World Trade Organization
<b>TIA</b>	transient ischemic attack	<b>YPLL</b>	years of potential life lost
<b>TIPS</b>	Tips from Former Smokers	<b>YRBS</b>	Youth Risk Behavior Survey
<b>TIRC</b>	Tobacco Industry Research Committee	<b>YRBSS</b>	Youth Risk Behavior Surveillance System
<b>TLR4</b>	toll-like receptor 4		
<b>tPA</b>	tissue plasminogen activator		
<b>TPSAC</b>	Tobacco Products Scientific Advisory Committee		
<b>TRIPS</b>	Trade-Related Aspects of Intellectual Property Rights		

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### Definitions and Alternative Nomenclature of Genetic Symbols Used in This Report

Throughout this report, genes are represented by their abbreviations in italics. In many cases, proteins and enzymes related to these genes have the same abbreviation, presented in roman type. Definitions, alternative genetic symbols, related proteins and enzymes, and polymorphisms and variant genotypes are listed alphabetically by gene abbreviation.

Gene symbol used in this report	Definition	Alternative gene symbol	Related protein/enzyme	Polymorphism/variant genotype
<i>AAT</i>	$\alpha$ 1-antitrypsin	<i>SERPINA1</i>	AAT	<i>PI*S, PI*Z, PI MZ, PI 22, GLN6VAL (S), GLN6LYS (Z)</i>
<i>ADD</i>	adducin 1 (alpha)	<i>ADD1</i>	ADD1	GLY460TRP
<i>AGT</i>	<i>O</i> <sup>6</sup> -alkylguanine–DNA alkyltransferase		AGT	<i>ILE143VAL, GLY160ARG</i>
<i>AHR</i>	aryl hydrocarbon receptor		AHR	
<i>AHRR</i>	aryl-hydrocarbon receptor repressor		AHRR	
<i>AIB1</i>	amplified in breast 1	<i>NCOA3</i>	AIB1	
<i>AKT</i>	v-akt murine thymoma viral oncogene homolog 1		AKT	
<i>ATM</i>	ataxia telangiectasia mutated		ATM	
<i>APC</i>	adenomatous polyposis coli		APC	
<i>APO2</i>	tumor necrosis factor receptor superfamily, member 10a		APO2	
<i>APOE</i>	apolipoprotein E	<i>TNFRSF10A</i>	APOE	*2
<i>ARMS2</i>	age-related maculopathy susceptibility 2	<i>LOC387715 A69S</i>	ARMS2	<i>rs10490942, rs10490912, rs10490924</i>
<i>BAD</i>	BCL2-associated agonist of cell death	<i>BBC2, BCL2L8</i>	BAD	
<i>BAX</i>	BCL2-associated X protein	<i>BCL2L4</i>	BAX	
<i>BCL3</i>	B-cell CLL/lymphoma 3		BCL3	
<i>BCL2L8</i>	BCL2-associated agonist of cell death	<i>BAD</i>	BCL2L8	
<i>BCL2L4</i>	BCL2-associated X protein	<i>BAX</i>	BCL2L4	
<i>BHLHB5</i>	basic helix-loop-helix family, member e22	<i>BHLHE22</i>	BHE22	
<i>BHLHE22</i>	basic helix-loop-helix family, member e22	<i>BHLHB5</i>	BHLHB5	
<i>BICD1</i>	bicaudal D homolog 1 ( <i>Drosophila</i> )		BICD1	
<i>BMP4 T538C</i>	bone morphogenetic protein 4		BMP4	
<i>BOLL</i>	bol, boule-like		BOLL	
<i>BRCA1</i>	breast cancer 1, early onset		BRCA1	
<i>BRCA2</i>	breast cancer 2, early onset	<i>BRCC2</i>	BRCA2	<i>HIS372ASN (T27113G), ILE3412VAL (G93268A)</i>

Gene symbol used in this report	Definition	Alternative gene symbol	Related protein/enzyme	Polymorphism/variant genotype
<i>BRCC2</i>	breast cancer 2, early onset	<i>BRCA2</i>	BRCC2	
<i>BRMS1</i>	breast cancer metastasis suppressor 1		BRMS1	
<i>C3</i>	complement component 3 (C3)		C3	<i>R102G, rs1047286, rs11569536, rs3745565, P314L</i>
<i>C7</i>	complement component 7	<i>CXCL10</i>	C7	
<i>CARD15</i>	nucleotide-binding oligomerization domain containing 2	<i>NOD2</i>	CARD15	
<i>CC2</i>	complement component 2		CC2	
<i>CDKN2A</i>	cyclin-dependent kinase inhibitor 2A	<i>P16</i>	CDKN2A	
<i>CFB</i>	complement factor B		CFB	
<i>CFH</i>	complement factor H		CFH	<i>rs3753394, rs800292, rs1061147, rs1061170, rs380390, rs1329428, Y402H, rs1410996, rs2274700, T1277C, CAATTTAG (P1), CGGCTTAG (P2), rs1410996-AG, rs1410996-GG, (GG)rs10490924/(TT), (TT)rs10490924/(CC), Y402H, YY, AA, CC, TT, CT, HH</i>
<i>CHRNA3</i>	cholinergic receptor, nicotinic, $\alpha$ 3		CHRNA3	
<i>CHRNA5</i>	cholinergic receptor, nicotinic, $\alpha$ 5		CHRNA5	
<i>CHRNB4</i>	cholinergic receptor, nicotinic, $\beta$ 4		CHRNB4	
<i>COX2</i>	mitochondrially encoded cytochrome c oxidase II		COX2	
<i>CRP</i>	C-reactive protein		CRP	
<i>CXCL10</i>	chemokine (C-X-C motif) ligand 10	<i>C7</i>	CXCL10	
<i>CYP17</i>	cytochrome P450, family 17, subfamily A, polypeptide 1	<i>CYP17A1</i>	CYP17	
<i>CYP1A1</i>	cytochrome P-450, family 1, subfamily A, polypeptide 1 (CYP1A1)		CYP1A1	<i>*2A, *2C, m1/m2, *1, *2, MSPI</i>
<i>CYP1A2</i>	cytochrome P-450, family 1, subfamily A, polypeptide 1		CYP1A1	
<i>CYP1B1</i>	cytochrome P450, family 1, subfamily B, polypeptide 1		CYP1B1	<i>LEU/LEU, VAL/VAL, 119S</i>
<i>CYP2A6</i>	cytochrome P-450, family 2, subfamily A, polypeptide 6		CYP2A6	
<i>CYP2E1</i>	cytochrome P450, family 2, subfamily E, polypeptide 1		CYP2E1	<i>RSAI</i>
<i>DAT1</i>	dopamine active transporter 1	<i>SLC6A3</i>	DAT1	<i>+/+</i>

Gene symbol used in this report	Definition	Alternative gene symbol	Related protein/enzyme	Polymorphism/variant genotype
<i>DCC</i>	deleted in colorectal carcinoma		DCC	
<i>EGFR</i>	epidermal growth factor receptor (erythroblastic leukemia viral (v-erb-b) onco homolog, avian)		EGFR	
<i>ELN</i>	Elastin		ELN	
<i>ELOVL4</i>	ELOVL fatty acid elongase 4		ELOVL4	
<i>ENOS</i>	endothelial nitric oxide synthase	<i>NOS3</i>	ENOS, NOS3	
<i>EPHB2</i>	EPH receptor B2	<i>ERK</i>	EPHB2	
<i>EPHX</i>	epoxide hydrolase		EPHX	
<i>EPHX1</i>	epoxide hydrolase 1, microsomal (xenobiotic)		EPHX1	
<i>ERBB2</i>	v-erb-b2 avian erythroblastic leukemia viral oncogene homolog 2	<i>HER2</i>	ERBB2	
<i>ERCC2</i>	excision repair cross-complementing rodent repair deficiency, complementation group 2	<i>XPD</i>	ERCC2	
<i>ERCC4</i>	excision repair cross-complementing rodent repair deficiency, complementation group 4	<i>XPF</i>	ERCC4	
<i>ERCC5</i>	excision repair cross-complementing rodent repair deficiency, complementation group 5	<i>XPG</i>	ERCC5	
<i>ERCC6</i>	excision repair cross-complementing rodent repair deficiency, complementation group 6		ERCC6	
<i>ERK</i>	extracellular signal-regulated kinase	<i>EPHB2</i>	ERK	
<i>ESR1</i>	estrogen receptor 1		ESR1	
<i>FAM13A</i>	family with sequence similarity 13, member A		FAM13A	
<i>FBLN5</i>	fibulin 5		FBLN5	
<i>FBXW7</i>	F-box and WD repeat domain containing 7, E3 ubiquitin protein ligase		FBXW7	
<i>FUT2</i>	fucosyltransferase 2 (secretor status included)	<i>SE</i>	FUT2	
<i>GADD45</i>	growth arrest and DNA-damage-inducible, alpha		GADD45	

Gene symbol used in this report	Definition	Alternative gene symbol	Related protein/enzyme	Polymorphism/variant genotype
<i>GFI1</i>	growth factor independent 1 transcription repressor		GFI1	
<i>GST</i>	glutathione-S-transferase		GST	
<i>GSTA1</i>	glutathione S-transferase alpha 1		GSTA1	
<i>GSTA4</i>	glutathione-S-transferase $\alpha$ 4		GSTA4	
<i>GSTM1</i>	glutathione-S-transferase $\mu$ 1 (GSTM1)	<i>GSTM1-1</i>	GSTM1	A/B
<i>GSTM3</i>	glutathione S-transferase $\mu$ 3 (brain)		GSTM3	
<i>GSTP1</i>	glutathione S-transferase $\pi$ 1		GSTP1	
<i>GSTT1</i>	glutathione-S-transferase $\theta$ 1 (GSTT1)	<i>GSTT1-1</i>	GSTT1	DEL
<i>HER2</i>	human epidermal growth factor receptor 2	<i>ERBB2</i>	HER2	
<i>HHIP</i>	hedgehog interacting protein		HHIP	
<i>HIF1A</i>	hypoxia inducible factor 1, alpha subunit (basic helix-loop-helix transcription factor)		HIF1A	
<i>HLA</i>	major histocompatibility complex	<i>HLA-A</i>	HLA	SE
<i>HLA-DPB1</i>	major histocompatibility complex, class II, DP beta 1		HLA-DPB1	
<i>HLA-DPB2</i>	major histocompatibility complex, class II, DP beta 2 (pseudogene)		HLA-DPB2	
<i>HO-1</i>	heme oxygenase (decycling) 1	<i>HMOX1</i>	HMOX1	
<i>HRAS</i>	v-Ha-ras Harvey rat sarcoma viral oncogene homolog	C-HRAS	C-HRAS, HRAS1 proto-oncoprotein	
<i>HTRA1</i>	HtrA (high temperature requirement factor A) serine peptidase 1		HTRA1	GG, rs11200638, AA
<i>IBD1</i>	nucleotide-binding oligomerization domain containing 2		IBD1	
<i>ICAM-1</i>	intercellular adhesion molecule 1		ICAM-1	GLY241ARG
<i>IGHMP2</i>	immunoglobulin mu binding protein 2		IGHMP2	
<i>IKK<math>\beta</math></i>	inhibitor of kappa light polypeptide gene enhancer in B-cells, kinase beta		IKK	
<i>IL-1<math>\beta</math></i>	interleukin-1 $\beta$ (IL-1 $\beta$ )		IL-1 $\beta$	
<i>IL-12</i>			IL-12	
<i>IL-13</i>	interleukin-13		IL-13	

Gene symbol used in this report	Definition	Alternative gene symbol	Related protein/enzyme	Polymorphism/variant genotype
<i>IL-4</i>	interleukin-4		IL-4	
<i>IL-5</i>	interleukin-5		IL-5	
<i>IL-6</i>	interleukin-6		IL-6	
<i>IL-8</i>	interleukin-8		IL-8	
<i>IL-10</i>	interleukin-10		IL-10	
IL-17A	interleukin -17A		IL-17A	
IL-18	interleukin -18		IL-18	
IL-23	interleukin -23		IL-23	
IL-33	interleukin -33		IL-33	
<i>IP-10</i>	chemokine (C-X-C motif) ligand 10	<i>C-7, CXCL10</i>	CXL 10	
<i>IREB2</i>	iron-responsive element binding protein 2		IREB2	
<i>IRF6</i>	interferon regulatory factor 6		IRF6	
JNK-1	c-Jun N-terminal kinase 1	<i>MAPK8</i>	JNK-1	
<i>KRAS</i>	K-ras (v-Ki-ras2 Kirsten rat sarcoma viral oncogene homolog)		KRAS	
<i>LacZ</i>	beta-galactosidase		LACZ	
<i>LC3B</i>	microtubule-associated protein 1 light chain 3 beta		LCB3	
<i>LGALS4</i>	lectin, galactoside-binding, soluble, 4		LGALS4	
<i>LIG4</i>	ligase IV, DNA, ATP-dependent		LIG4	
<i>LOC387715 A69S</i>	age-related maculopathy susceptibility 2	<i>ARMS2</i>	LOC387715	<i>GG, GT+TT, rs10490924, rs10490942</i>
<i>MAOA</i>	monoamine oxidase A		MAOA	<i>5'vVNTR</i>
<i>MAPK8</i>	mitogen-activated protein kinase 8	<i>JNK-1</i>	MK08	
<i>mEH3</i>	microsomal epoxide hydrolase (mEH) polymorphism in exon 3		mEH3	
<i>MEK</i>	mitogen-activated protein kinase		MEK	
<i>MGMT</i>	O <sup>6</sup> -methylguanine-DNA methyltransferase		MGMT	<i>LEU84PHE, ILE143VAL</i>
<i>MnSOD2</i>	manganese superoxide dismutase 2		MnSOD2	<i>VAL (wild type), ALA</i>
<i>MMP</i>	matrix metalloproteinase		MMP	

Gene symbol used in this report	Definition	Alternative gene symbol	Related protein/enzyme	Polymorphism/variant genotype
MMP 9	matrix metalloproteinase 9 (gelatinase B, 92kDa gelatinase, 92kDa type IV collagenase)		MMP 9	
MMP 12	matrix metalloproteinase 12 (macrophage elastase)		MMP 12	
<i>MPO</i>	myeloperoxidase		MPO	
<i>MYH9</i>	myosin, heavy chain 9, non-muscle		MYH9	
<i>MSX1</i>	muscle segment homeobox 1		MSX1	<i>CA, X1.1, X1.3, X2.1, X2.4, T2090G</i>
<i>MTHFR</i>	methylenetetrahydrofolate reductase		MTHFR	<i>677C→T, CC</i>
<i>NAT1</i>	<i>N</i> -acetyltransferase 1		NAT1, ARY1	<i>1088, 1095, AA vs. TT, AA vs. CC, T1095A, 1088A, 1088T→A, 1095C→A</i>
<i>NAT2</i>	<i>N</i> -acetyltransferase 2		NAT2, ARY2	<i>_SNP2, 282C→T, 341T→C, 481T→C, 590G→A, 857G→A, *4, *5, *6, *7, *12, *13, *14, rs9987109, rs1208</i>
<i>NCOA3</i>	nuclear receptor coactivator 3	<i>AIB1</i>	NCOA3	
<i>NOD2</i>	nucleotide-binding oligomerization domain containing 2	<i>CARD15</i>	NOD2	
<i>NOS3</i>	nitric oxide synthase 3 (endothelial cell)	<i>ENOS</i>	ENOS, NOS3	<i>A(-922)G, SNP2, GLU298ASP, G894T</i>
<i>NOTCH1</i>	notch1		NOTCH1	
<i>NPPA</i>	natriuretic peptide A		NPAA	<i>2238T→C</i>
<i>P16</i>	cyclin-dependent kinase inhibitor 2A	<i>CDKN2A</i>	P16	
<i>P53</i>	tumor suppressor		P53	
<i>PI</i>	glutathione S-transferase pi 1	<i>SERPINA1</i>		<i>S, Z, ZZ</i>
PI7	polymerase (DNA directed), epsilon 3, accessory subunit	<i>POLE3</i>	P17	
<i>PIK3CA</i>	phosphatidylinositol-4,5-bisphosphate 3-kinase, catalytic subunit alpha		PIK3CA	
<i>polA</i>	polymerase (DNA directed), alpha 1, catalytic subunit	<i>POLA1</i>	POLA	
<i>PTPN22</i>	protein tyrosine phosphatase, non-receptor type 22		PTPN22	
<i>RAD23B</i>	RAD23 homolog B ( <i>S. cerevisiae</i> )		RAD23B	
<i>RAF</i>	rapidly accelerated fibrosarcoma		RAF	

Gene symbol used in this report	Definition	Alternative gene symbol	Related protein/enzyme	Polymorphism/variant genotype
<i>Rag1</i>	recombination activating gene 1		Rag1	
<i>RAS</i>	rat sarcoma		RAS	
<i>RASSF1A</i>	Ras association (RalGDS/AF-6) domain family member 1 (A isoform)		RASSF1A	
<i>RUNX1</i>	runt-related transcription factor 1		RUNX1	
<i>SE</i>	fucosyltransferase 2	<i>FUT2</i>	SE	<i>Rs4646903</i>
<i>SERPINA1</i>	serpin peptidase inhibitor, clade A ( $\alpha$ -1 antitrypsin), member 1	<i>AAT</i>	SERPINA1	<i>PI*Z, SZ</i>
<i>SERPINE2</i>	serpin peptidase inhibitor, clade E (nexin, plasminogen activator inhibitor type 2), member 2	<i>PI7</i>	SERPINE2	
<i>SERPINA3</i>	serpin peptidase inhibitor, clade A ( $\alpha$ -1 antitrypsin), member 3		SERPINA3	
<i>SOD2</i>	superoxide dismutase 2		SOD2	
<i>SOX5</i>	SRY (sex determining region Y)-box 5		SOX5	
<i>STK11</i>	serine/threonine protein kinase 11		STK11	
<i>SULT</i>	sulfotransferase		SULT	
<i>SULT1A1</i>	sulfotransferase family, cytosolic, 1A, phenol-preferring, member 1		SULT1L1	<i>ARG/HIS, *HIS</i>
<i>TGF-<math>\alpha</math></i>	transforming growth factor- $\alpha$		TGF-	<i>TAQ1</i>
<i>TNF<math>\alpha</math></i>	tumor necrosis factor (TNF superfamily, member 2) $\alpha$		TNF $\alpha$	
<i>TGF-<math>\beta</math></i>	transforming growth factor- $\beta$		TGF- $\beta$	
<i>TGF-<math>\beta</math>3</i>	transforming growth factor- $\beta$ 3		TGF- $\beta$ 3	<i>CA, x5.1, 5'UTR.1, T-24in4C, C641A, G15572</i>
<i>TNFRSF10A</i>	tumor necrosis factor receptor superfamily, member 10a		TNFRSF10A	
<i>TNFRSF10C</i>	tumor necrosis factor receptor superfamily, member 10c, decoy without an intracellular domain		TNFRSF10C	
<i>TP53</i>	tumor protein 53		TP53	
<i>TP63</i>	tumor protein 63		TP63	
<i>TRPA1</i>	transient receptor potential cation channel, subfamily A, member 1		TRPA1	
<i>UGT1A7</i>	UDP glucuronosyltransferase 1 family, polypeptide A7		UGT1A7	<i>SNP1</i>
<i>VEGF</i>	vascular endothelial growth factor	<i>VEGFA</i>	VEGF	

Gene symbol used in this report	Definition	Alternative gene symbol	Related protein/enzyme	Polymorphism/variant genotype
<i>XPC</i>	xeroderma pigmentosum, complementation group C		XPC	
<i>XPD</i>	xeroderma pigmentosum. Complementation group D	<i>ERCC2</i>	XPD	<i>LYS751GLN, GLN/GLN</i>
<i>XPF</i>	xeroderma pigmentosum, complementation group F	<i>ERCC4</i>	XPF	
XPG	xeroderma pigmentosum, complementation group G	<i>ERCC5</i>	XPG	
<i>XRCC1</i>	x-ray repair complementing defective repair in Chinese hamster cells 1		XRCC1	<i>ARG399GLN, ARG213HIS, ARG194TRP, ARG280HIS, C26602T, GLN632GLN, 194 ARG/ARG</i>
<i>XRCC2</i>	x-ray repair complementing defective repair in Chinese hamster cells 2		XRCC2	
<i>XRCC3</i>	x-ray repair complementing defective repair in Chinese hamster cells 3		XRCC3	
<i>XRCC5</i>	x-ray repair complementing defective repair in Chinese hamster cells 5		XRCC5	

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