

## Supplementary File

### List of abbreviations

**Figure 2**

PTGS1	Prostaglandin G/H synthase 1
ESR1	Estrogen receptor
PTGS2	Prostaglandin G/H synthase 2
HSP90AB1	Heat shock protein HSP 90-beta
ampC	Beta-lactamase
NCOA2	Nuclear receptor coactivator 2
CALM	Calmodulin-1
RXRA	Retinoic acid receptor RXR-alpha
CAT	Catalase
HAS2	Hyaluronan synthase 2
CDK2	Cyclin-dependent kinase 2
AR	Androgen receptor
PGR	Progesterone receptor
RELA	Transcription factor p65
VEGFA	Vascular endothelial growth factor A
CDKN1A	Cyclin-dependent kinase inhibitor 1
MMP2	Matrix Metallopeptidase 2
MMP9	Matrix Metallopeptidase 9
PIK3CG	Phosphatidylinositol 4,5-bisphosphate 3-kinase catalytic subunit gamma isoform
HMOX1	Heme oxygenase 1
NFE2L2	Nuclear factor erythroid 2-related factor 2
Nqo1	NAD(P)H dehydrogenase [quinone] 1
NOS2	Nitric Oxide Synthase 2
PPARG	Peroxisome Proliferator Activated Receptor Gamma
DPP4	Dipeptidyl Peptidase 4
PRSS1	Serine Protease 1
CHRM1	Cholinergic Receptor Muscarinic 1
NOS3	Nitric Oxide Synthase 3
GABRA2	Gamma-Aminobutyric Acid Type A Receptor Subunit Alpha2
ACHE	Acetylcholinesterase
SLC6A2	Sodium-dependent noradrenaline transporter
CHRM2	Muscarinic acetylcholine receptor M2
ADRA1B	Alpha-1B adrenergic receptor
GABRA1	Gamma-aminobutyric acid receptor subunit alpha-1
TOP2	DNA topoisomerase 2-alpha
F7	Coagulation factor VII
IKBKB	Inhibitor of nuclear factor kappa-B kinase subunit beta

AKT1	AKT Serine/Threonine Kinase 1
BCL2	Apoptosis regulator Bcl-2
BAX	Apoptosis regulator BAX
TNF	Tumor necrosis factor
JUN	Transcription factor Jun
AHSA1	Activator Of HSP90 ATPase Activity 1
CASP3	Caspase-3
MAPK8	Mitogen-activated protein kinase 8
XDH	Xanthine dehydrogenase/oxidase
MMP1	Matrix Metalloproteinase 1
STAT1	Signal transducer and activator of transcription 1-alpha/beta
CYP3A4	Cytochrome P450 3A4
CYP1A2	Cytochrome P450 1A2
CYP1A1	Cytochrome P450 1A1
ICAM1	Intercellular adhesion molecule 1
SELE	E-selectin
VCAM1	Vascular cell adhesion protein 1
NR1I2	Nuclear receptor subfamily 1 group I member 2
CYP1B1	Cytochrome P450 1B1
ALOX5	Polyunsaturated fatty acid 5-lipoxygenase
GSTP1	Glutathione S-transferase P
AHR	Aryl hydrocarbon receptor
PSMD3	Proteasome 26S Subunit, Non-ATPase 3
SLC2A4	Solute Carrier Family 2 Member 4
NR1I3	NR1I3
INSR	Insulin Receptor
DIO1	Iodothyronine Deiodinase 1
PPP3CA	Protein Phosphatase 3 Catalytic Subunit Alpha
GSTM1	Glutathione S-Transferase Mu 1
GSTM2	Glutathione S-Transferase Mu 2
AKR1C3	Aldo-Keto Reductase Family 1 Member C3
SLPI	Secretory Leukocyte Peptidase Inhibitor
EGFR	Epidermal Growth Factor Receptor
CCND1	Cyclin D1
BCL2L1	BCL2 Like 1
CASP9	Caspase 9
MAPK1	Mitogen-Activated Protein Kinase 1
IL10	Interleukin 10
RB1	RB Transcriptional Corepressor 1
IL6	Interleukin 6
TP53	Tumor Protein P53
NFKBIA	NFKB Inhibitor Alpha
TOP1	DNA Topoisomerase I

MDM2	MDM2 Proto-Oncogene
APP	Amyloid Beta Precursor Protein
PCNA	Proliferating Cell Nuclear Antigen
ERBB2	Erb-B2 Receptor Tyrosine Kinase 2
CASP7	Caspase 7
MCL1	Induced myeloid leukemia cell differentiation protein Mcl-1
BIRC5	Baculoviral IAP repeat-containing protein 5
IL2	Interleukin-2
CCNB1	G2/mitotic-specific cyclin-B1
TYR	Tyrosinase
IFNG	Interferon Gamma
IL4	Interleukin 4
TOP2A	DNA Topoisomerase II Alpha
CD40LG	<b>CD40 ligand</b>
PTGES	<b>Prostaglandin E synthase</b>
NUF2	<b>Kinetochore protein nuf2</b>
ADCY2	<b>Adenylate cyclase type 2</b>
MET	MET Proto-Oncogene, Receptor Tyrosine Kinase
AKR1B1	Aldo-Keto Reductase Family 1 Member B
KCNH2	Potassium Voltage-Gated Channel Subfamily H Member 2
SCN5A	Sodium Voltage-Gated Channel Alpha Subunit 5
F10	Coagulation Factor X
ADRB2	Adrenoceptor Beta 2
MMP3	Matrix Metalloproteinase 3
MAOB	Monoamine Oxidase B
FOS	Fos Proto-Oncogene, AP-1 Transcription Factor Subunit
EIF6	Eukaryotic Translation Initiation Factor 6
PLAU	Plasminogen Activator, Urokinase
EGF	Epidermal Growth Factor
ELK1	ETS Transcription Factor ELK1
POR	Cytochrome P450 Oxidoreductase
ODC1	Ornithine Decarboxylase 1
CASP8	Caspase 8
RAF1	Raf-1 Proto-Oncogene, Serine/Threonine Kinase
SOD1	Superoxide Dismutase 1
PRKCA	Protein Kinase C Alpha
HIF1A	Hypoxia Inducible Factor 1 Subunit Alpha
RUNX1T1	RUNX1 Partner Transcriptional Co-Repressor 1
HSPA5	Heat Shock Protein Family A (Hsp70) Member 5
ACACA	Acetyl-CoA Carboxylase Alpha
CAV1	Caveolin 1
MYC	MYC Proto-Oncogene, BHLH Transcription Factor
F3	Coagulation Factor III, Tissue Factor

GJA1	Gap Junction Protein Alpha 1
IL1B	Interleukin 1 Beta
CCL2	C-C Motif Chemokine Ligand 2
PTGER3	Prostaglandin E Receptor 3
CXCL8	C-X-C Motif Chemokine Ligand 8
PRKCB	Protein Kinase C Beta
DUOX2	Dual Oxidase 2
HSPB1	Heat Shock Protein Family B (Small) Member 1
TGFB1	Transforming Growth Factor Beta 1
SULT1E1	Sulfotransferase Family 1E Member 1
MGAM	Maltase-Glucoamylase
PLAT	Plasminogen Activator, Tissue Type
THBD	Thrombomodulin
SERPINE1	Serpin Family E Member 1
COL1A1	Collagen Type I Alpha 1 Chain
PTEN	Phosphatase And Tensin Homolog
IL1A	Interleukin 1 Alpha
MPO	Myeloperoxidase
NCF1	Neutrophil Cytosolic Factor 1
ABCA2	ATP Binding Cassette Subfamily A Member 2
PARP1	Poly(ADP-Ribose) Polymerase 1
COL8A1	Collagen Type VIII Alpha 1 Chain
gyrB	DNA gyrase subunit B
CXCL11	C-X-C Motif Chemokine Ligand 11
CXCL2	C-X-C Motif Chemokine Ligand 2
DCAF5	DDB1 And CUL4 Associated Factor 5
CHEK2	Checkpoint Kinase 2
CLDN4	Claudin 4
PPARA	Peroxisome Proliferator Activated Receptor Alpha
PPARD	Peroxisome Proliferator Activated Receptor Delta
HSF1	Heat Shock Transcription Factor 1
CRP	C-Reactive Protein
CXCL10	C-X-C Motif Chemokine Ligand 10
CHUK	Component Of Inhibitor Of Nuclear Factor Kappa B Kinase Complex
SPP1	Sphingosine-1-phosphate phosphatase 1
RUNX2	RUNX Family Transcription Factor 2
RASSF1	RASSF1
E2F1	E2F Transcription Factor 1
E2F2	E2F Transcription Factor 2
ACP3	Acid Phosphatase 3
CTSD	Cathepsin D
IGFBP3	Insulin Like Growth Factor Binding Protein 3
IGF2	Insulin Like Growth Factor 2

IRF1	Interferon Regulatory Factor 1
ERBB3	Erb-B2 Receptor Tyrosine Kinase 3
PON1	Paraoxonase 1
PCOLCE	Procollagen C-Endopeptidase Enhancer
NPEPPS	Aminopeptidase Puromycin Sensitive
HK2	Hexokinase 2
NKX3-1	NK3 Homeobox 1
RASA1	RAS P21 Protein Activator 1
ALB	Albumin
CTNNB1	Catenin Beta 1
MMP10	Matrix Metalloproteinase 10
ADORA1	Adenosine A1 Receptor
PDE3A	Phosphodiesterase 3A
PDE4B	Phosphodiesterase 4B
GRIA2	Glutamate Ionotropic Receptor AMPA Type Subunit 2
EGR1	Early Growth Response 1
TDP1	Tyrosyl-DNA Phosphodiesterase 1
ITGB3	Integrin Subunit Beta 3
ATM	ATM Serine/Threonine Kinase
INS	Insulin
KCNJ11	Potassium Inwardly Rectifying Channel Subfamily J Member 11
ADORA2A	Adenosine A2a Receptor
RASGRF1	Ras Protein Specific Guanine Nucleotide Releasing Factor 1
CHRNA4	Cholinergic Receptor Nicotinic Alpha 4 Subunit
ADIPOQ	Adiponectin, C1Q And Collagen Domain Containing
ARC	Activity Regulated Cytoskeleton Associated Protein
FSHB	Follicle Stimulating Hormone Subunit Beta
DBT	Dihydrolipoamide Branched Chain Transacylase E2
LHB	Luteinizing Hormone Subunit Beta
NPSR1	Neuropeptide S Receptor 1
NPS	Neuropeptide S
ADORA3	Adenosine A3 Receptor
ZFX3	Zinc Finger Homeobox 3
CRLF1	Cytokine Receptor Like Factor 1
DRD2	Dopamine Receptor D2
TFAM	Transcription Factor A, Mitochondrial
NEK11	NIMA Related Kinase 11
MEF2A	Myocyte Enhancer Factor 2A
MEF2D	Myocyte Enhancer Factor 2D
IER5	Immediate Early Response 5
AMY2A	Amylase Alpha 2A
HMGCR	3-Hydroxy-3-Methylglutaryl-CoA Reductase
FCER2	Fc Epsilon Receptor II

ITGB2	Integrin Subunit Beta 2
TBXA2R	Thromboxane A2 Receptor
CTSB	Cathepsin B
STAT3	Signal Transducer And Activator Of Transcription 3
FASN	Fatty Acid Synthase
CREB1	CAMP Responsive Element Binding Protein 1
PRKCG	Protein Kinase C Gamma
ATF2	Activating Transcription Factor 2
CSF2	Colony Stimulating Factor 2
PECAM1	Platelet And Endothelial Cell Adhesion Molecule 1
MAPK8IP2	Mitogen-Activated Protein Kinase 8 Interacting Protein 2
PTPN6	Protein Tyrosine Phosphatase Non-Receptor Type 6
GAP43	Growth Associated Protein 43
PTPN1	Protein Tyrosine Phosphatase Non-Receptor Type 1
INPPL1	Inositol Polyphosphate Phosphatase Like 1
LITAF	Lipopolysaccharide Induced TNF Factor
CCND2	Cyclin D2
FASLG	Fas Ligand
CASP1	Caspase-1
ENPP7	Ectonucleotide pyrophosphatase/phosphodiesterase family member 7

**Figure 3**

PTGS2	Prostaglandin-Endoperoxide Synthase 2
CDK2	Cyclin Dependent Kinase 2
MMP2	Matrix Metalloproteinase 2
PIK3CG	Phosphatidylinositol-4,5-Bisphosphate 3-Kinase Catalytic Subunit Gamma
Nqo1	NAD(P)H Quinone Dehydrogenase 1
TOP2	DNA Topoisomerase II Alpha
JUN	Transcription factor Jun
MAPK8	Mitogen-Activated Protein Kinase 8
MMP1	Matrix Metalloproteinase 1
AKR1C3	Aldo-Keto Reductase Family 1 Member C3
EGFR	Epidermal Growth Factor Receptor
TP53	Tumor Protein P53
MMP3	Matrix Metalloproteinase 3
PLAU	Plasminogen Activator, Urokinase
SOD1	Superoxide Dismutase 1
ESR1	Estrogen Receptor 1
HSP90AB1	Heat Shock Protein 90 Alpha Family Class B Member 1
PGR	Progesterone Receptor
CTSD	Cathepsin D
RXRA	Retinoid X Receptor Alpha

AR	Androgen Receptor
FASN	Fatty Acid Synthase
PPARG	Peroxisome Proliferator Activated Receptor Gamma
ALOX5	Arachidonate 5-Lipoxygenase
APP	Amyloid Beta Precursor Protein
MET	MET Proto-Oncogene, Receptor Tyrosine Kinase
TNF	Tumor Necrosis Factor
CYP1A2	Cytochrome P450 Family 1 Subfamily A Member 2
SELE	Selectin E
ADRB2	Adrenoceptor Beta 2
ADORA1	Adenosine A1 Receptor
PDE4B	Phosphodiesterase 4B
CHRM1	Cholinergic Receptor Muscarinic 1
ACHE	Acetylcholinesterase
CHRM2	Cholinergic Receptor Muscarinic 2
MPO	Myeloperoxidase
NOS3	Nitric Oxide Synthase 3
ODC1	Ornithine Decarboxylase 1
PPARD	Peroxisome Proliferator Activated Receptor Delta
PTGS1	Prostaglandin-Endoperoxide Synthase 1
F10	Coagulation Factor X
PON1	Paraoxonase 1
DPP4	Dipeptidyl Peptidase 4
PPARA	Peroxisome Proliferator Activated Receptor Alpha
AKR1B1	Aldo-Keto Reductase Family 1 Member B
KCNJ11	Potassium Inwardly Rectifying Channel Subfamily J Member 11
SCN5A	Sodium Voltage-Gated Channel Alpha Subunit 5
VEGFA	Vascular Endothelial Growth Factor A
F3	Coagulation Factor III, Tissue Factor
CCL2	C-C Motif Chemokine Ligand 2
CAT	Catalase
GSTP1	Glutathione S-Transferase Pi 1
EGF	Epidermal Growth Factor
INSR	Insulin Receptor
MGAM	Maltase-Glucoamylase
IFNG	Interferon Gamma
DRD2	Dopamine Receptor D2
ACACA	Acetyl-CoA Carboxylase Alpha
MAPK1	Mitogen-Activated Protein Kinase 1
CTSB	Cathepsin B
IL6	Interleukin 6
COL1A1	Collagen Type I Alpha 1 Chain
ampC	Beta-lactamase

IL1B	Interleukin 1 Beta
GABRA2	Gamma-Aminobutyric Acid Type A Receptor Subunit Alpha2
MAOB	Monoamine Oxidase B
SLC6A2	Solute Carrier Family 6 Member 2
KCNH2	Potassium Voltage-Gated Channel Subfamily H Member 2
PLAT	Plasminogen Activator, Tissue Type

**Figure 4**

AKT1	AKT Serine/Threonine Kinase 1
STAT3	Signal Transducer And Activator Of Transcription 3
MAPK1	Mitogen-Activated Protein Kinase 1
JUN	Transcription factor Jun
TP53	Tumor Protein P53
TNF	Tumor Necrosis Factor
RELA	RELA Proto-Oncogene, NF-KB Subunit
IL6	Interleukin 6
APP	Amyloid Beta Precursor Protein
VEGFA	Vascular Endothelial Growth Factor A
MAPK8	Mitogen-Activated Protein Kinase 8
CTNNB1	Catenin Beta 1
CXCL8	C-X-C Motif Chemokine Ligand 8
EGFR	Epidermal Growth Factor Receptor
FOS	Fos Proto-Oncogene, AP-1 Transcription Factor Subunit
CCND1	Cyclin D1
EGF	Epidermal Growth Factor
CDKN1A	Cyclin Dependent Kinase Inhibitor 1A
INS	Insulin
RB1	RB Transcriptional Corepressor 1
ESR1	Estrogen Receptor 1
PRKCA	Protein Kinase C Alpha
RXRA	Retinoid X Receptor Alpha
MYC	MYC Proto-Oncogene, BHLH Transcription Factor
CASP8	Caspase 8
IL2	Interleukin 2
IL4	Interleukin 4
ATF2	Activating Transcription Factor 2
IL1B	Interleukin 1 Beta
PRKCB	Protein Kinase C Beta
TGFB1	Transforming Growth Factor Beta 1
CXCL2	C-X-C Motif Chemokine Ligand 2
CCL2	C-C Motif Chemokine Ligand 2
STAT1	Signal Transducer And Activator Of Transcription 1
ADCY2	Adenylate Cyclase 2



CXCL10	C-X-C Motif Chemokine Ligand 10
CASP3	Caspase 3
IFNG	Interferon Gamma
IL10	Interleukin 10
MMP9	Matrix Metalloproteinase 9
PPARG	Peroxisome Proliferator Activated Receptor Gamma
CREB1	CAMP Responsive Element Binding Protein 1
CDK2	Cyclin Dependent Kinase 2
NFKBIA	NFKB Inhibitor Alpha
CHRM2	Cholinergic Receptor Muscarinic 2
BCL2	BCL2 Apoptosis Regulator
ITGB3	Integrin Subunit Beta 3
ALB	Albumin
IGF2	Insulin Like Growth Factor 2
CSF2	Colony Stimulating Factor 2
ERBB2	Erb-B2 Receptor Tyrosine Kinase 2
MDM2	MDM2 Proto-Oncogene
NOS2	Nitric Oxide Synthase 2
HIF1A	Hypoxia Inducible Factor 1 Subunit Alpha
PSMD3	Proteasome 26S Subunit, Non-ATPase 3
ITGB2	Integrin Subunit Beta 2
CXCL11	C-X-C Motif Chemokine Ligand 11
NCOA2	Nuclear Receptor Coactivator 2
HSP90AB1	Heat Shock Protein 90 Alpha Family Class B Member 1
BCL2L1	BCL2 Like 1
E2F1	E2F Transcription Factor 1
AR	Androgen Receptor
CCNB1	Cyclin B1
IL1A	Interleukin 1 Alpha
ICAM1	Intercellular Adhesion Molecule 1
PTPN6	Protein Tyrosine Phosphatase Non-Receptor Type 6
PPARA	Peroxisome Proliferator Activated Receptor Alpha
ADRB2	Adrenoceptor Beta 2
PTGER3	Prostaglandin E Receptor 3
ADORA3	Adenosine A3 Receptor
ADORA1	Adenosine A1 Receptor
DRD2	Dopamine Receptor D2
CYP1A1	Cytochrome P450 Family 1 Subfamily A Member 1
NOS3	Nitric Oxide Synthase 3
CHUK	Component Of Inhibitor Of Nuclear Factor Kappa B Kinase Complex
PTPN1	Protein Tyrosine Phosphatase Non-Receptor Type 1
IKKB	Inhibitor Of Nuclear Factor Kappa B Kinase Subunit Beta
SERPINE1	Serpin Family E Member 1

IGFBP3	Insulin Like Growth Factor Binding Protein 3
PTGS2	Prostaglandin-Endoperoxide Synthase 2
PCNA	Proliferating Cell Nuclear Antigen
MMP2	Matrix Metallopeptidase 2
MMP3	Matrix Metallopeptidase 3
NPSR1	Neuropeptide S Receptor 1
NPS	Neuropeptide S
CAV1	Caveolin 1
CD40LG	CD40 Ligand
PTEN	Phosphatase And Tensin Homolog
ATM	ATM Serine/Threonine Kinase
VCAM1	Vascular Cell Adhesion Molecule 1
TBXA2R	Thromboxane A2 Receptor
RAF1	Raf-1 Proto-Oncogene, Serine/Threonine Kinase
IRF1	Interferon Regulatory Factor 1
RASA1	RAS P21 Protein Activator 1
NFE2L2	NFE2 Like BZIP Transcription Factor 2
MET	MET Proto-Oncogene, Receptor Tyrosine Kinase
MMP1	Matrix Metallopeptidase 1
ADIPOQ	Adiponectin, C1Q And Collagen Domain Containing
CHRM1	Cholinergic Receptor Muscarinic 1
INPPL1	Inositol Polyphosphate Phosphatase Like 1
SPP1	Secreted Phosphoprotein 1
EGR1	Early Growth Response 1
HMOX1	Heme Oxygenase 1
CCND2	Cyclin D2
ADRA1B	Adrenoceptor Alpha 1B
AKR1C3	Aldo-Keto Reductase Family 1 Member C3
CYP3A4	Cytochrome P450 Family 3 Subfamily A Member 4
ERBB3	Erb-B2 Receptor Tyrosine Kinase 3
CASP9	Caspase 9
CHEK2	Checkpoint Kinase 2
MCL1	MCL1 Apoptosis Regulator, BCL2 Family Member
BIRC5	Baculoviral IAP Repeat Containing 5
FASLG	Fas Ligand
COL1A1	Collagen Type I Alpha 1 Chain
E2F2	E2F Transcription Factor 2
CTSD	Cathepsin D
LHB	Luteinizing Hormone Subunit Beta
FSHB	Follicle Stimulating Hormone Subunit Beta
CRP	C-Reactive Protein
MEF2D	Myocyte Enhancer Factor 2D
INSR	Insulin Receptor

SLC2A4	Solute Carrier Family 2 Member 4
MEF2A	Myocyte Enhancer Factor 2A
PGR	Progesterone Receptor
BAX	BCL2 Associated X, Apoptosis Regulator
PPP3CA	Protein Phosphatase 3 Catalytic Subunit Alpha
CASP1	Caspase 1
CASP7	Caspase 7
PLAU	Urokinase-type plasminogen activator
ELK1	ETS Transcription Factor ELK1
PRKCG	Protein Kinase C Gamma
MMP10	Matrix Metalloproteinase 10
CYP1A2	Cytochrome P450 Family 1 Subfamily A Member 2
CAT	Catalase
HSPB1	Heat Shock Protein Family B (Small) Member 1
TOP2A	DNA Topoisomerase II Alpha
CALM3	Calmodulin 3
PARP1	Poly(ADP-Ribose) Polymerase 1
POR	Cytochrome P450 Oxidoreductase
GRIA2	Glutamate Ionotropic Receptor AMPA Type Subunit 2
PECAM1	Platelet And Endothelial Cell Adhesion Molecule 1
F10	Coagulation Factor X
PRSS1	Serine Protease 1
AHR	Aryl Hydrocarbon Receptor
CYP1B1	Cytochrome P450 Family 1 Subfamily B Member 1
SULT1E1	Sulfotransferase Family 1E Member 1
SOD1	Superoxide Dismutase 1
PIK3CG	Phosphatidylinositol-4,5-Bisphosphate 3-Kinase Catalytic Subunit Gamma
ALOX5	Arachidonate 5-Lipoxygenase
PTGS1	Prostaglandin-Endoperoxide Synthase 1
MGAM	Maltase-Glucoamylase
NUF2	NUF2 Component Of NDC80 Kinetochore Complex
TOP1	DNA Topoisomerase I
FCER2	Fc Epsilon Receptor II
NQO1	NAD(P)H Quinone Dehydrogenase 1
SELE	Selectin E
RUNX2	RUNX Family Transcription Factor 2
NCF1	Neutrophil Cytosolic Factor 1
SCN5A	Sodium Voltage-Gated Channel Alpha Subunit 5
RASGRF1	Ras Protein Specific Guanine Nucleotide Releasing Factor 1
RASSF1	Ras Association Domain Family Member 1
ZFH3	Zinc Finger Homeobox 3
GJA1	Gap Junction Protein Alpha 1
PPARD	Peroxisome Proliferator Activated Receptor Delta

SLPI	Secretory Leukocyte Peptidase Inhibitor
GSTM1	Glutathione S-Transferase Mu 1
NR1I2	Nuclear Receptor Subfamily 1 Group I Member 2
F3	Coagulation Factor III, Tissue Factor
F7	Coagulation Factor VII
HSF1	Heat Shock Transcription Factor 1 P
PLAT	Plasminogen Activator, Tissue Type
MPO	Myeloperoxidase
ODC1	Ornithine Decarboxylase 1
PTGES	Prostaglandin E Synthase
ACACA	Acetyl-CoA Carboxylase Alpha
FASN	Fatty Acid Synthase
AHSA1	Activator Of HSP90 ATPase Activity 1
AKR1B1	Aldo-Keto Reductase Family 1 Member B
AMY2A	Amylase Alpha 2A
PCOLCE	Procollagen C-Endopeptidase Enhancer
COL8A1	Collagen Type VIII Alpha 1 Chain
CTSB	Cathepsin B
GSTP1	Glutathione S-Transferase Pi 1
XDH	Xanthine Dehydrogenase
NR1I3	Nuclear Receptor Subfamily 1 Group I Member 3
MAOB	Monoamine Oxidase B
DPP4	Dipeptidyl Peptidase 4
THBD	Thrombomodulin
GABRA1	Gamma-Aminobutyric Acid Type A Receptor Subunit Alpha1
GABRA2	Gamma-Aminobutyric Acid Type A Receptor Subunit Alpha2
GSTM2	Glutathione S-Transferase Mu 2
HSPA5	Heat Shock Protein Family A (Hsp70) Member 5
KCNH2	Potassium Voltage-Gated Channel Subfamily H Member 2
MAPK8IP2	Mitogen-Activated Protein Kinase 8 Interacting Protein 2
TDP1	Tyrosyl-DNA Phosphodiesterase 1

**Figure 5**

PI3K-Akt	phosphatidylinositol 3-kinase-Akt
MAPK	Mitogen-Activated Protein Kinase
AGE-RAGE	Advanced Glycation End Product-Receptor for AGE
TNF	Tumor Necrosis Factor
IL	Interleukin
HIF	Hypoxia Inducible Factor

**Figure 6**

ADCY2	Adenylate Cyclase 2
AKT1	AKT Serine/Threonine Kinase 1

AKR1B1	Aldo-Keto Reductase Family 1 Member B
BIRC5	Baculoviral IAP Repeat Containing 5
FASLG	Fas Ligand
AR	Androgen Receptor
BAX	BCL2 Associated X, Apoptosis Regulator
CCND1	Cyclin D1
BCL2	BCL2 Apoptosis Regulator
BCL2L1	BCL2 Like 1
CALM2	Calmodulin 2
CASP3	Caspase 3
CASP7	Caspase 7
CASP8	Caspase 8
CASP9	Caspase 9
RUNX1T1	RUNX1 Partner Transcriptional Co-Repressor 1
CCND2	Cyclin D2
CDK2	Cyclin Dependent Kinase 2
CDKN1A	Cyclin Dependent Kinase Inhibitor 1A
CHUK	Component Of Inhibitor Of Nuclear Factor Kappa B Kinase Complex
CTNNB1	Catenin Beta 1
NQO1	NAD(P)H Quinone Dehydrogenase 1
E2F1	E2F Transcription Factor 1
E2F2	E2F Transcription Factor 2
EGF	Epidermal Growth Factor
EGFR	Epidermal Growth Factor Receptor
ELK1	ETS Transcription Factor ELK1
ERBB2	Erb-B2 Receptor Tyrosine Kinase 2
ESR1	Estrogen Receptor 1
FASN	Fatty Acid Synthase
FOS	Fos Proto-Oncogene, AP-1 Transcription Factor Subunit
GSTM1	Glutathione S-Transferase Mu 1
GSTM2	Glutathione S-Transferase Mu 2
GSTP1	Glutathione S-Transferase Pi 1
HIF1A	Hypoxia Inducible Factor 1 Subunit Alpha
HMOX1	Heme Oxygenase 1
HSP90AB1	Heat Shock Protein 90 Alpha Family Class B Member 1
IFNG	Interferon Gamma
IGF2	Insulin Like Growth Factor 2
IKBKB	Inhibitor Of Nuclear Factor Kappa B Kinase Subunit Beta
IL2	Interleukin 2
IL4	Interleukin 4
IL6	Interleukin 6
CXCL8	C-X-C Motif Chemokine Ligand 8
JUN	Transcription factor Jun

MDM2	MDM2 Proto-Oncogene
MET	MET Proto-Oncogene, Receptor Tyrosine Kinase
MMP1	Matrix Metallopeptidase 1
MMP2	Matrix Metallopeptidase 2
MMP9	Matrix Metallopeptidase 9
MYC	MYC Proto-Oncogene, BHLH Transcription Factor
NFE2L2	NFE2 Like BZIP Transcription Factor 2
NFKBIA	NFKB Inhibitor Alpha
NKX3-1	NK3 Homeobox 1
NOS2	Nitric Oxide Synthase 2
PPARD	Peroxisome Proliferator Activated Receptor Delta
PPARG	Peroxisome Proliferator Activated Receptor Gamma
PRKCA	Protein Kinase C Alpha
PRKCB	Protein Kinase C Beta
PRKCG	Protein Kinase C Gamma
MAPK1	Mitogen-Activated Protein Kinase 1
MAPK8	Mitogen-Activated Protein Kinase 8
PTEN	Phosphatase And Tensin Homolog
PTGER3	Prostaglandin E Receptor 3
PTGS2	Prostaglandin-Endoperoxide Synthase 2
RAF1	Raf-1 Proto-Oncogene, Serine/Threonine Kinase
RB1	RB Transcriptional Corepressor 1
RELA	RELA Proto-Oncogene, NF-KB Subunit
RXRA	Retinoid X Receptor Alpha
STAT1	Signal Transducer And Activator Of Transcription 1
STAT3	Signal Transducer And Activator Of Transcription 3
TGFB1	Transforming Growth Factor Beta 1
TP53	Tumor Protein P53
VEGFA	Vascular Endothelial Growth Factor A
RASSF1	Ras Association Domain Family Member 1
CAV1	Caveolin 1
ICAM1	Intercellular Adhesion Molecule 1
IL1A	Interleukin 1 Alpha
IL1B	Interleukin 1 Beta
ITGB3	Integrin Subunit Beta 3
MEF2A	Myocyte Enhancer Factor 2A
NOS3	Nitric Oxide Synthase 3
PECAM1	Platelet And Endothelial Cell Adhesion Molecule 1
PLAT	Plasminogen Activator, Tissue Type
CCL2	C-C Motif Chemokine Ligand 2
SELE	Selectin E
THBD	Thrombomodulin
TNF	Tumor Necrosis Factor

VCAM1	Vascular Cell Adhesion Molecule 1
NCF1	Neutrophil Cytosolic Factor 1
CREB1	CAMP Responsive Element Binding Protein 1
INS	Insulin
MMP3	Matrix Metalloproteinase 3
PLAU	Plasminogen Activator, Urokinase
ATF2	Activating Transcription Factor 2
PPP3CA	Protein Phosphatase 3 Catalytic Subunit Alpha
COL1A1	Collagen Type I Alpha 1 Chain
EGR1	Early Growth Response 1
F3	Coagulation Factor III, Tissue Factor
SERPINE1	Serpin Family E Member 1
CHRM1	Cholinergic Receptor Muscarinic 1
CHRM2	Cholinergic Receptor Muscarinic 12
ERBB3	Erb-B2 Receptor Tyrosine Kinase 3
INSR	Insulin Receptor
MCL1	MCL1 Apoptosis Regulator, BCL2 Family Member
PIK3CG	Phosphatidylinositol-4,5-Bisphosphate 3-Kinase Catalytic Subunit Gamma
SPP1	Secreted Phosphoprotein 1
CSF2	Colony Stimulating Factor 2
CXCL2	C-X-C Motif Chemokine Ligand 2
CXCL10	C-X-C Motif Chemokine Ligand 10
IRF1	Interferon Regulatory Factor 1
PTPN6	Protein Tyrosine Phosphatase Non-Receptor Type 6
HSPB1	Heat Shock Protein Family B (Small) Member 1
RASA1	RAS P21 Protein Activator 1
RASGRF1	Ras Protein Specific Guanine Nucleotide Releasing Factor 1
MAPK8IP2	Mitogen-Activated Protein Kinase 8 Interacting Protein 2
PARP1	Poly (ADP-Ribose) Polymerase 1
ATM	ATM Serine/Threonine Kinase
CTSB	Cathepsin B
CTSD	Cathepsin D
HK2	Hexokinase 2
CAT	Catalase
CCNB1	Cyclin B1
IL10	Interleukin 10
SLC2A4	Solute Carrier Family 2 Member 4
CYP1B1	Cytochrome P450 Family 1 Subfamily B Member 1
IGFBP3	Insulin Like Growth Factor Binding Protein 3
CHEK2	Checkpoint Kinase 2