

Supplementary Table 1:

Gene Name	Protein Accession	Nucleotide Accession	First primer Forward	First primer Backward
SYTL1	NP_116261	NM_032872	aagtggaagtgcccctggac	gttggtctgaggggtagaag
CYBB	NP_000388	NM_000397	aagcaggagtttcaagatgcg	gaaaatgaaatgcactccccg
NCF1	NP_000256	NM_000265	ggttgggtgtctgcagatg	agcttccgcttgggtctctc
CYBA	NP_000092	NM_000101	cagatcgagtgggccatgtg	tcacacgacctcgctcggtc
LOC401374	XP_376628	XM_376628	ggttgggtgtctgcagatg	agcttccgcttgggtctctc
NOXO1	NP_751907	NM_172167	ataggcctttcagggcgag	acagagtgccacgcaccctc
LOC283247	XP_208058	XM_208058	taccctcacaatgtgtccaac	ctcgtcccatatgagttgttc
DUOX2	NP_054799	NM_014080	tgtgtggatacccaagctg	cagaagttctatagttgtgc
RUFY1	NP_079434	NM_025158	acaagctgcagcaggagctg	tgtgagcagctgacacac
DUOX1	NP_059130	NM_017434	ggtagcagatgtgccagatac	ctcataatgggtgggagaagtg
NOX5	NP_078781	NM_024505	ggatcttgcctctgagcatg	atctgaagccgaactctcac
NOX3	NP_056533	NM_015718	tggacgggcccttggaaac	tagaaatgaacacctctgggg
ARHGDIB	NP_001166	NM_001175	aaaaagccccagagccacatg	ctgtccactccttctaatcg
NOX4	NP_058627	NM_016931	tcgagatttactactgcctcc	gtcccatatgagttgtctgg
ARHGDI2	NP_004300	NM_004309	gatgagcactcggtcaactac	cagtcctccagctcctcttg
NOXA1	NP_006638	NM_006647	gtgctgggggagcagggtg	tagggctgatcctcctctg
NOX1	NP_008983	NM_007052	caccaattcccaggattgaag	gaaccttctaggatccagac
PRDX2	NP_859428	NM_181738	gtaacgcgcgcatcggaaaag	tcactctaaagacttgggag
PRDX2	NP_859427	NM_181737	gtaacgcgcgcatcggaaaag	tattccttgcctcatccacg
PRDX1	NP_859048	NM_181697	atgctaaaattgggcaccctg	ttgctctttggacatcaggc
PRDX1	NP_859047	NM_181696	atgctaaaattgggcaccctg	ttgctctttggacatcaggc
PRDX5	NP_857635	NM_181652	tcagcgggctataactctgct	gagcttgagatgatattggg
PRDX3	AAH59169	BC059169	gcatgcaccctatcttaagg	agtactcttggagcagctg
PRDX4	AAH03609	BC003609	ctgcacctaaagcaagcgaag	atacttcagcttccagctgg
TXN2	NP_036605	NM_012473	atggctcagcgacttctctg	tcagccaatcagcttctcag
TXNRD2	NP_006431	NM_006440	atttggagaaggctggggtag	ttggagatgagcagcttgac
TXNRD2	NP_665691	NM_145748	atttggagaaggctggggtag	ttggagatgagcagcttgac
TXN	NP_003320	NM_003329	atggtagagcagatcgagagc	atggtagagcagcttgac
TXNRD1	NP_877393	NM_182729	ttgaaaccgtaggggtgaag	agcgttggatcacagacaatg
TXNL2	NP_006532	NM_006541	agaaattgactcatgctgcc	ttctcctcagataggcag
TXNL1	NP_004777	NM_004786	tatcaaggagcagatgctgtg	gtggcttctctttttgccc
TXNDC9	NP_005774	NM_005783	aactggatcagatggatgagg	tcctcggatgcttctttcc
TXNDC	NP_110382	NM_030755	aagtagatgtcacagagcagc	tatctgtggccaatgatggac
TXNDC3	NP_057700	NM_016616	gacaattgcttccaactctg	ttcctcaggatcctcaaagag
TXNDC2	NP_115619	NM_032243	aagaagggtgacatcccccaag	caagttttccttaagggcgc
PTGES2	NP_945177	NM_198939	gctgtggcctgtgggtg	aggatgggcaccttctgtag
TXNRD3	XP_051264	XM_051264	taggctgtgagaagattgggtg	cagcagccttctgagtgatg
PRDX5	NP_857634	NM_181651	tcagcgggctataactctgct	gagcttgagatgatattggg
GLRX2	NP_057150	NM_016066	tgaaccctcagagataagcaag	acaactgatgaaactagtgagg
PRDX5	NP_036226	NM_012094	agcaagacggtgagtggaag	gagcttgagatgatattggg
TXNL2	NP_006532	NM_006541	agaaattgactcatgctgcc	ttctcctcagataggcag
GLRX	NP_002055	NM_002064	ggctcaagagtttgaactg	ttactgcagagctccaactg
LOC392531	XP_373367	XM_373367	ttgtaatacaagtcgggacgg	ttactctaaaagggcggagtg
LOC389207	XP_371694	XM_371694	aggatagcttctggtgttag	accagcagagtttacaaccg
C14orf87	NP_057501	NM_016417	atgagcgggtccctcggc	cacttggagtctgtcttcc
SH3BGR1	NP_112576	NM_031286	cgaaatcaagtcaccagcagag	tcagccagcttccaggaactc
GLRX2	NP_932066	NM_197962	ggctgttggagcaggag	acactgatgaactagtgagg
GPX6	NP_874360	NM_182701	agcctcaaaataggagggtgg	gaactgctttaggtactccag
GPX1	NP_000572	NM_000581	cagtcggtgtatgcttctc	ttcagatgagcagctcagctg
GPX1	NP_958799	NM_201397	cagtcggtgtatgcttctc	acctgatgcccacaactggtg
LOC389839	XP_372197	XM_372197	cagtcggtgtatgcttctc	taggcaacatcgttgcgacac
GPX7	NP_056511	NM_015696	tggctgctctgtgggctg	aagtcttctgctcagtagg
GPX3	NP_002075	NM_002084	actgcctaggtggcataagtg	ttactcctctgacccccag
GPX4	NP_002076	NM_002085	gccttgcgcctactgaag	ctagaaatagtgggcaggctc
GPX2	AAH67221	BC067221	atggcttcatgccaagtcc	tatggcaacttaaggaggcg
GPX5	NP_001500	NM_001509	cccaagcaggagaagatgaag	gaattgctcaagtacgccag
GPX7	AAH32788	BC032788	tggctgctctgtgggctg	aagtcttctgctcagtagg
GPX5	NP_003987	NM_003996	tgactcacagtttaagggtcg	tcccccttcaaaaagctgg
CAT	NP_001743	NM_001752	gttgaacagatagccttcgac	acagattgcttctcctctg
LOXHD1	NP_653213	NM_144612	ccatgctgactacgttcaag	aacaaggtcattgacaagcc
ALOX5AP	NP_001620	NM_001629	actgtaggcaatgtgtcctg	tagggaatgagaagttagagg
ALOXE3	NP_067641	NM_021628	ggccattgagagcttctctc	ttagatggagacgctgttctc
ALOX15B	NP_001132	NM_001141	atgcagatttggggtgcagtg	ttagatggagacgctgttctc
ALOX5	NP_000689	NM_000698	gaggtgtagacatctactac	atggccactgttcggaatc
ALOX12B	NP_001130	NM_001139	gttggaatgcactggagaag	atgctgttctcaatcagcacc

ALOX12	NP_000688	NM_000697	tacggctctgggagatcattg	tcagatggtgacactgttctc
PTGS2	NP_000954	NM_000963	cattcaccaggcaaatgctg	ctacagttcagtcgaacgttc
PTGS1	NP_000953	NM_000962	tacagctacgagcagttctg	tcagagctctgtggatggtc
PTGS1	NP_542158	NM_080591	ttcgggtccagttccaatac	tcagagctctgtggatggtc
PRKCI	NP_002731	NM_002740	tgtgtaaggaaggattacggc	cagacacattcttgcagac
PRKQC	NP_006248	NM_006257	gatggacatatcaagatcgcg	ccggggtcatgaaggaaaag
PRKD3	NP_005804	NM_005813	agccagaaaatgtgctgctg	gccataatgaagtgcttggg
PRKCH	NP_006246	NM_006255	accacgagggctactgtaaac	tggttgaattctggagacac
PRKCD	NP_997704	NM_212539	gggatggccacatcaagattg	tcaatcttccaggagggtctc
PRKCB1	NP_997700	NM_212535	atgctcgattctgagggacac	ctgggttagataagagaagcc
PRKCD	NP_006245	NM_006254	gggatggccacatcaagattg	tcaatcttccaggagggtctc
PRKCB1	NP_002729	NM_002738	gattctgagggacacatcaag	atccttgaattctgattggtc
PRKCABP	NP_036539	NM_012407	atcgagaagttcggcattcgg	tcaggagtcacaccagcttc
PRKCE	NP_005391	NM_005400	cttctggatgcagaaggtcac	ggcatcaggtcttccacaaag
PRKCA	NP_002728	NM_002737	attgctgacttgggatgtgc	tactgcactctgtaagatggg
PRKCDBP	NP_659477	NM_145040	acaccaccagcaacaccttg	tcaggctacactctcatttg
PRKCG	NP_002730	NM_002739	ttggcatgtgaaggagaacg	tacatgacgggcacaggcac
PRKCZ	NP_002735	NM_002744	actacggcatgtgcaagggaag	cctcgggtggacagcaataatg
RACGAP1	NP_037409	NM_013277	tgaccttcgccttaacagag	tcacttgagcattggagaagc
RAC2	NP_002863	NM_002872	atgcaggccatcaagtggtg	ctagaggaggctcagggcg
ARHGEF7	NP_003890	NM_003899	agcctccgaaaacacccaag	atagattggtctatcccagg
ARHGAP30	NP_859071	NM_181720	gtctatgccctgttctcttg	tcacagtccttccacttccc
RAP1GDS1	NP_006982	NM_021159	tctgaaatgcactcctgttcag	cagcttccacagtaagtctc
CDC42	NP_426359	NM_044472	ttaagtgtgttggggcg	acagcactcctttgggttg
KRAS	NP_203524	NM_033360	aacttgtgtagttggagctg	attttcacacagccaggagtc
KRAS	NP_004976	NM_004985	aacttgtgtagttggagctg	ttacacacttcttctgacttc
HRAS	NP_005334	NM_005343	tgacggaataaagctggtgg	agcacacactgcagctcatg
PRDX6	NP_004896	NM_004905	cgacttctgggagactcatg	gggtgtagcggagggtattc
COVA1	NP_006366	NM_006375	aggaagaaaatgacagcctcc	ttaggtcagctcaagccctc
TXNL4	XP_371120	XM_371120	tgctgacatgctcccgcac	tagcggtagcttgggtgtag
FLJ10094	NP_060463	NM_017993	atgaggtggagctgtaaac	ccttcaaaggcacacaactc

All Nested Primers Start with the following sequence: gcgtaatacagactcactatagg

Gene Name	Protein Accession	Nucleotide Acc	Nested primer Forward gcgtaatacagactcactatagg+	Nested primer Backward gcgtaatacagactcactatagg+
SYTL1	NP_116261	NM_032872	acgtgggactggggctc	ccatccaccattcgcac
CYBB	NP_000388	NM_000397	aagatagcgggtgatggc	gactcagagttggagatgc
NCF1	NP_000256	NM_000265	aaagcaaaagcagggctgg	ctgcagcggttcaggatg
CYBA	NP_000092	NM_000101	tccggcctgatcctcatc	accgggatggggttgac
LOC401374	XP_376628	XM_376628	aaagcaaaagcagggctgg	ctgcagcggttcaggatg
NOXO1	NP_751907	NM_172167	agggagcctggacgtg	tccagggccctgcgtg
LOC283247	XP_208058	XM_208058	accaaagcaacattgggg	gatagtgaaattgggtccac
DUOX2	NP_054799	NM_014080	accttgatggaccgttgg	ctgtgacgagctgacag
RUFY1	NP_079434	NM_025158	ctgcagctgcagctctc	ttgggttaggagggcag
DUOX1	NP_059130	NM_017434	agctgtaccttgatggacc	tgccgttgatgagctgac
NOX5	NP_078781	NM_024505	accccccttgcctcattc	tgccccctcagcaccttg
NOX3	NP_056533	NM_015718	tcactaccagtggtgtg	gctgatgaatacaagtggg
ARHGDIB	NP_001166	NM_001175	gaggaggatgacgatgatg	tgagggtgcttctgtctc
NOX4	NP_058627	NM_016931	agactccgaaattctgcc	tgatagtgaaattgggtcc
ARHGDI A	NP_004300	NM_004309	gaagagatccaggagatc	atggtgagattccactccc
NOXA1	NP_006638	NM_006647	ctggtgactgcaccgtg	ggctcctgacatccgag
NOX1	NP_008983	NM_007052	gccagtgaggatgtttcc	atcggtgacagcatttgcg
PRDX2	NP_859428	NM_181738	ctgactcaaggccacag	tttccagatgggaaaacgc
PRDX2	NP_859427	NM_181737	ctgactcaaggccacag	gggcttaatcgtgtcactg
PRDX1	NP_859048	NM_181697	cccaactcaaagccacag	tgatggtatcactgccagg
PRDX1	NP_859047	NM_181696	cccaactcaaagccacag	tgatggtatcactgccagg
PRDX5	NP_857635	NM_181652	cggtcagctgcggcag	gccatctggttccacattc
PRDX3	AAH59169	BC059169	acagccgttgcaatggag	gacttggctgatcgtagg
PRDX4	AAH03609	BC003609	tactgggaaggaacagctg	tactaccaggttccagc
TXN2	NP_036605	NM_012473	ctctgtcatctccaggaag	ctccaactgatcctcctc
TXNRD2	NP_006431	NM_006440	cgacactcagaagatcctg	tacctctcagagcatgtg
TXNRD2	NP_665691	NM_145748	cgacactcagaagatcctg	tacctctcagagcatgtg
TXN	NP_003320	NM_003329	gactgctttcaggaagcc	ggctccagaaaattccacc

TXNRD1	NP_877393	NM_182729	cctgtcacagatgaagaac	atacctctgcacagacagg
TXNL2	NP_006532	NM_006541	ggaactcctcaagaaccac	cacaatatccaatcctccc
TXNL1	NP_004777	NM_004786	agaaaatgacctggaagc	ttgttgctggactggag
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TXNDC	NP_110382	NM_030755	actgagtgacggtttacc	gagagcgtgtcttatggc
TXNDC3	NP_057700	NM_016616	ctgggaccaagaactgtg	cataggcgttagatgctcc
TXNDC2	NP_115619	NM_032243	agggtgacattccaagtc	caaagttcatccacctttc
PTGES2	NP_945177	NM_198939	cctggcctggaggctg	ggagaactgatctcagcc
TXNRD3	XP_051264	XM_051264	gagaagagtgaaaaatacc	ccaaagtcgtgaaccacct
PRDX5	NP_857634	NM_181651	cggtcagctgcggcag	gccatctggtccacattc
GLRX2	NP_057150	NM_016066	ggatgtttacacgtgggtg	gcctatgagtgtagtgc
PRDX5	NP_036226	NM_012094	tccgcagtttcagcagag	gccatctggtccacattc
TXNL2	NP_006532	NM_006541	ggaactcctcaagaaccac	cacaatatccaatcctccc
GLRX	NP_002055	NM_002064	caaaatccagcctgggaag	tccccactctgttgcaag
LOC392531	XP_373367	XM_373367	ttcagcaacgcatgggtg	tcagttctccaccagacc
LOC389207	XP_371694	XM_371694	gccagtgagaagggtttg	tgcaagccgtacactcag
C14orf87	NP_057501	NM_016417	agctgcgggcgtctg	catctaaaagggcggagtg
SH3BGRL3	NP_112576	NM_031286	tgggaagcgcatccaatac	ctcgagcgtgtttgttcc
GLRX2	NP_932066	NM_197962	gcaggctgcttgacag	gcctatgagtgtagtgc
GPX6	NP_874360	NM_182701	gcaacaaagggtaacagg	gtctgactgactgtgctg
GPX1	NP_000572	NM_000581	gggagcctgtgagcctg	aatggtctggaagcgcg
GPX1	NP_958799	NM_201397	gggagcctgtgagcctg	aagccgagcaccaccag
LOC389839	XP_372197	XM_372197	gggagcctgtgagcctg	agaccaggtgatgacttg
GPX7	NP_056511	NM_015696	gcaggacttctacgacttc	atgagcttctcagcagc
GPX3	NP_002075	NM_002084	gcaccattacgagtagcg	cctcatgtaggacaggatg
GPX4	NP_002076	NM_002085	tgctctggtgggctctg	cttctatcaccagggg
GPX2	AAH67221	BC067221	ctatgacctcagtgccatc	ggtgatggtgggaaggtg
GPX5	NP_001500	NM_001509	ggattgccacaaagacgag	gtctgtctgactgagctg
GPX7	AAH32788	BC032788	gcaggacttctacgacttc	atgagcttctcagcagc
GPX5	NP_003987	NM_003996	cttctcctgacgcttctg	ctaggtaaaaatcctcccc
CAT	NP_001743	NM_001752	aacatgccacctggcattg	agatccggactgcacaaag
LOXHD1	NP_653213	NM_144612	ggcccaattattccctac	tggtggaaggaagagtg
ALOX5AP	NP_001620	NM_001629	atcagcgtggtccagaatg	ggtggagatcgttttatg
ALOXE3	NP_067641	NM_021628	cgtdggctactattatccc	aatgaggggaggggtccag
ALOX15B	NP_001132	NM_001141	tcatcggatctactacc	aggggtcaggttaggttag
ALOX5	NP_000689	NM_000698	accaggtggtgaggag	tggcagctgttcttctg
ALOX12B	NP_001130	NM_001139	tgtgacggagatcatcacc	caggtagtagtaggggatg
ALOX12	NP_000688	NM_000697	gatcgtccaccttctctac	catagggccagtcagggtg
PTGS2	NP_000954	NM_000963	gttctggtggttaggaatg	tatcatctagtcggagcg
PTGS1	NP_000953	NM_000962	caacacctcatgttggtg	catcatcctgactggcatc
PTGS1	NP_542158	NM_080591	gccatggagttcaaccatc	catcatcctgactggcatc
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PRKCQ	NP_006248	NM_006257	gttaggagatccaagacg	ctggtccatgctgtgatc
PRK3	NP_005804	NM_005813	catcagcagagccatttcc	gcatgtatttcccagcggag
PRKCH	NP_006246	NM_006255	tggcagactcggaatgtg	agtttcaaactcatcctgtg
PRKCD	NP_997704	NM_212539	gaacatattcggggagagc	gggggtcacaaaggaagaag
PRKCB1	NP_997700	NM_212535	ggaaaacatctgggatggg	ggtccaagttcatgatgaag
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PRKCB1	NP_002729	NM_002738	ggaaaacatctgggatggg	tcctgatgacttctggtc
PRKCABP	NP_036539	NM_012407	aaccatcaagccgatgctg	agcagcccctcgtgtatc
PRKCE	NP_005391	NM_005400	tgacttcgggatgtgcaag	ttcctcctggttgatctgc
PRKCA	NP_002728	NM_002737	catgatggatggagtcacg	aactgggggttgacatacg
PRKCDBP	NP_659477	NM_145040	tgagctgcacgccaac	gagcagagcttctcgggc
PRKCG	NP_002730	NM_002739	acgacaacccgcaccttc	atccgggtgcacgaagtc
PRKCZ	NP_002735	NM_002744	cacaacgagcactttctgc	agcctcgaactctgactg
RACGAP1	NP_037409	NM_013277	tggaaagcagcagaaatcac	agttgcctgtcgtcctag
RAC2	NP_002863	NM_002872	caagacctgcctctcatc	gcttctgctgccgctg
ARHGEF7	NP_003890	NM_003899	ccctggagcctgagctg	cttcaggacttctcacc
ARHGAP30	NP_859071	NM_181720	atgctgtagctccactc	gcatatgatctgcgctgag
RAP1GDS1	NP_066982	NM_021159	aatagatgcacaagaagctg	ctgctgggcaacactttg
CDC42	NP_426359	NM_044472	gtctcctgatctctacac	cagctaggatagcctcatc
KRAS	NP_203524	NM_033360	taggcaagagtgcttgac	ctgtattgtcggatctccc
KRAS	NP_004976	NM_004985	taggcaagagtgcttgac	ccatcttgtcatcttttc
HRAS	NP_005334	NM_005343	aagagtcgctgacctc	actctcatcaggagggttc
PRDX6	NP_004896	NM_004905	attctcttccccacctc	agatggggagctcttgggtg
COVA1	NP_006366	NM_006375	gatgcctaccggaatgaag	ccatcttcttccaggctg
TXNL4	XP_371120	XM_371120	tgcaaacgctggtgag	tccttgggggacaccac
FLJ10094	NP_060463	NM_017993	gaaaacctcacaaggacc	ctttttccagctggctc