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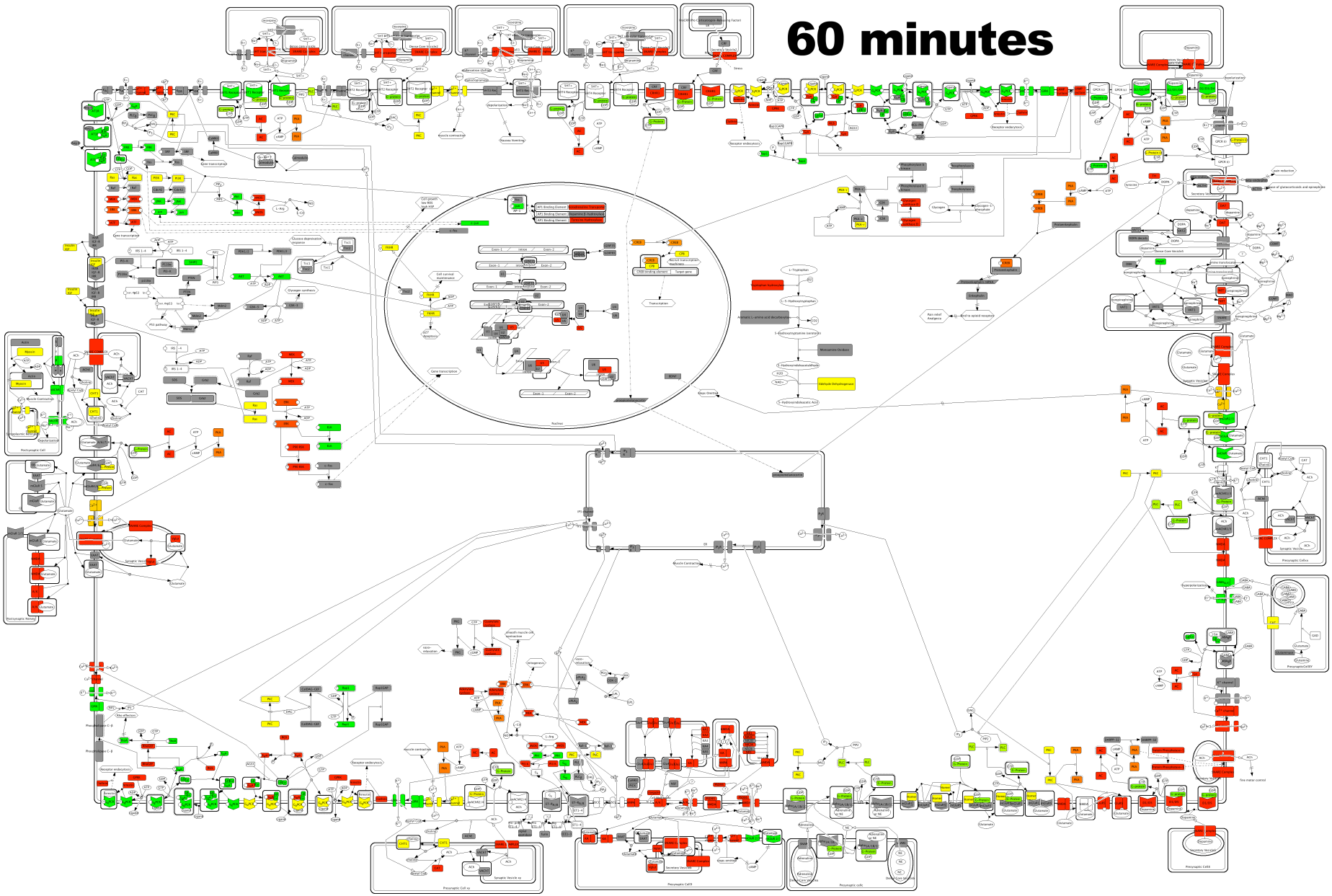
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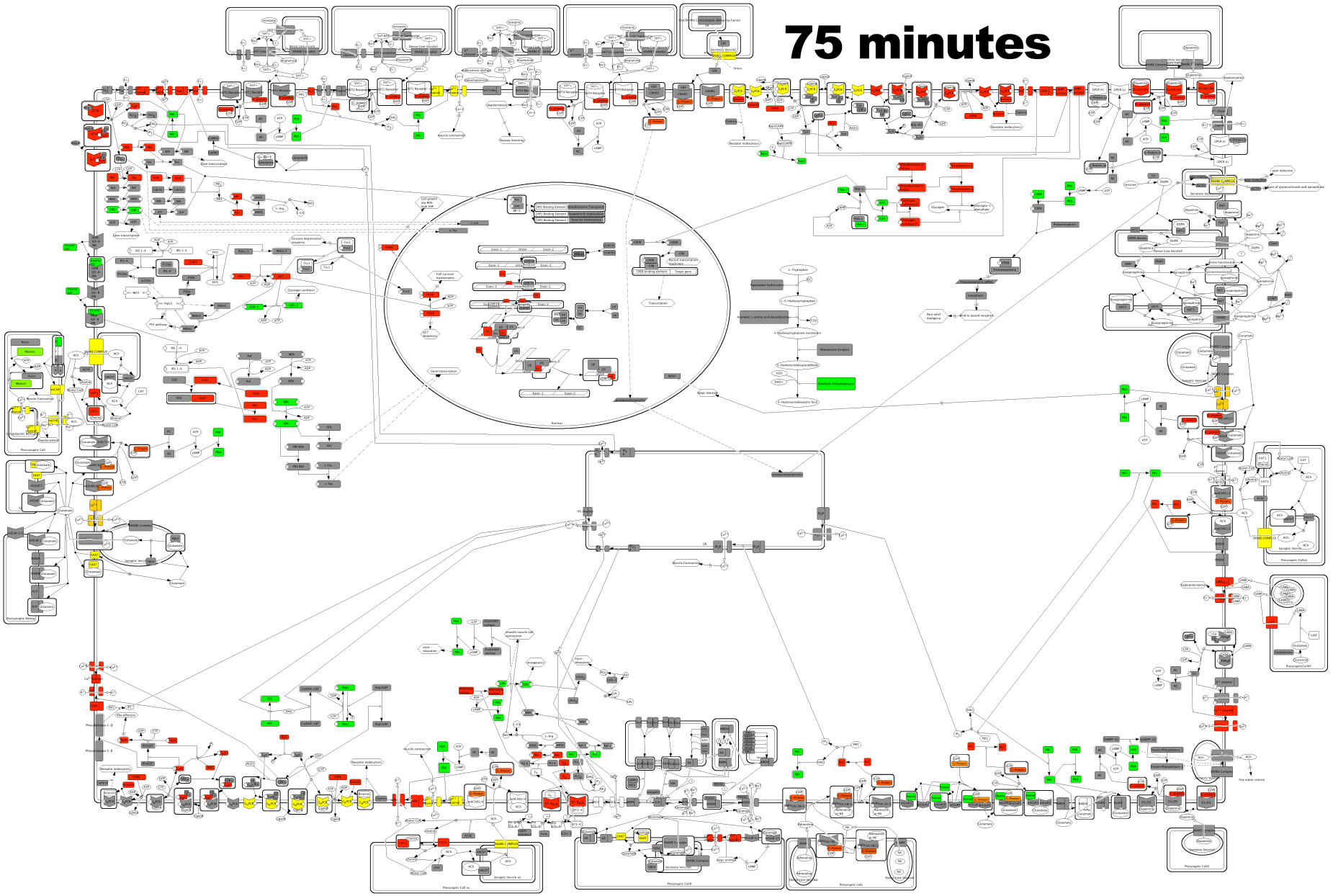
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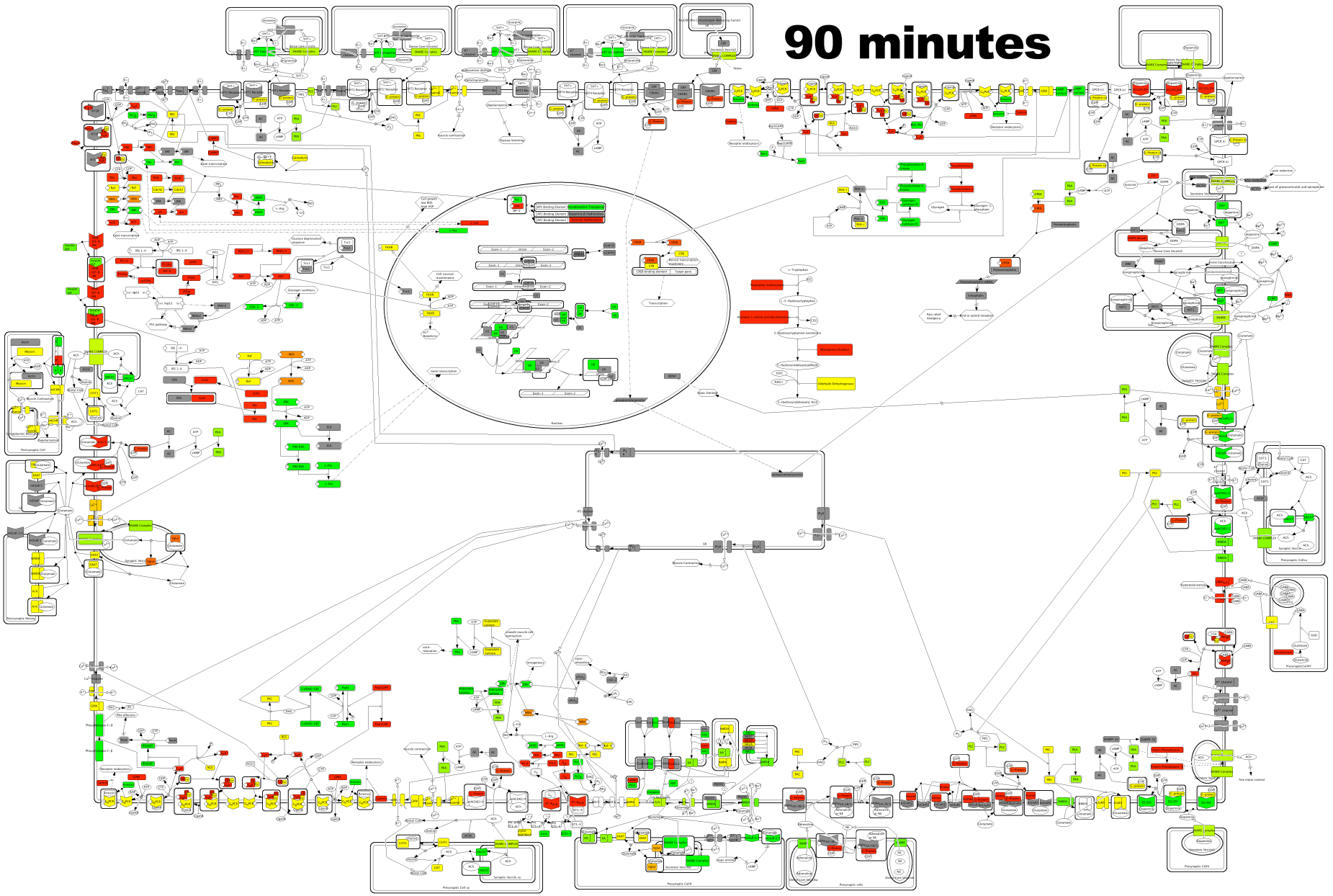
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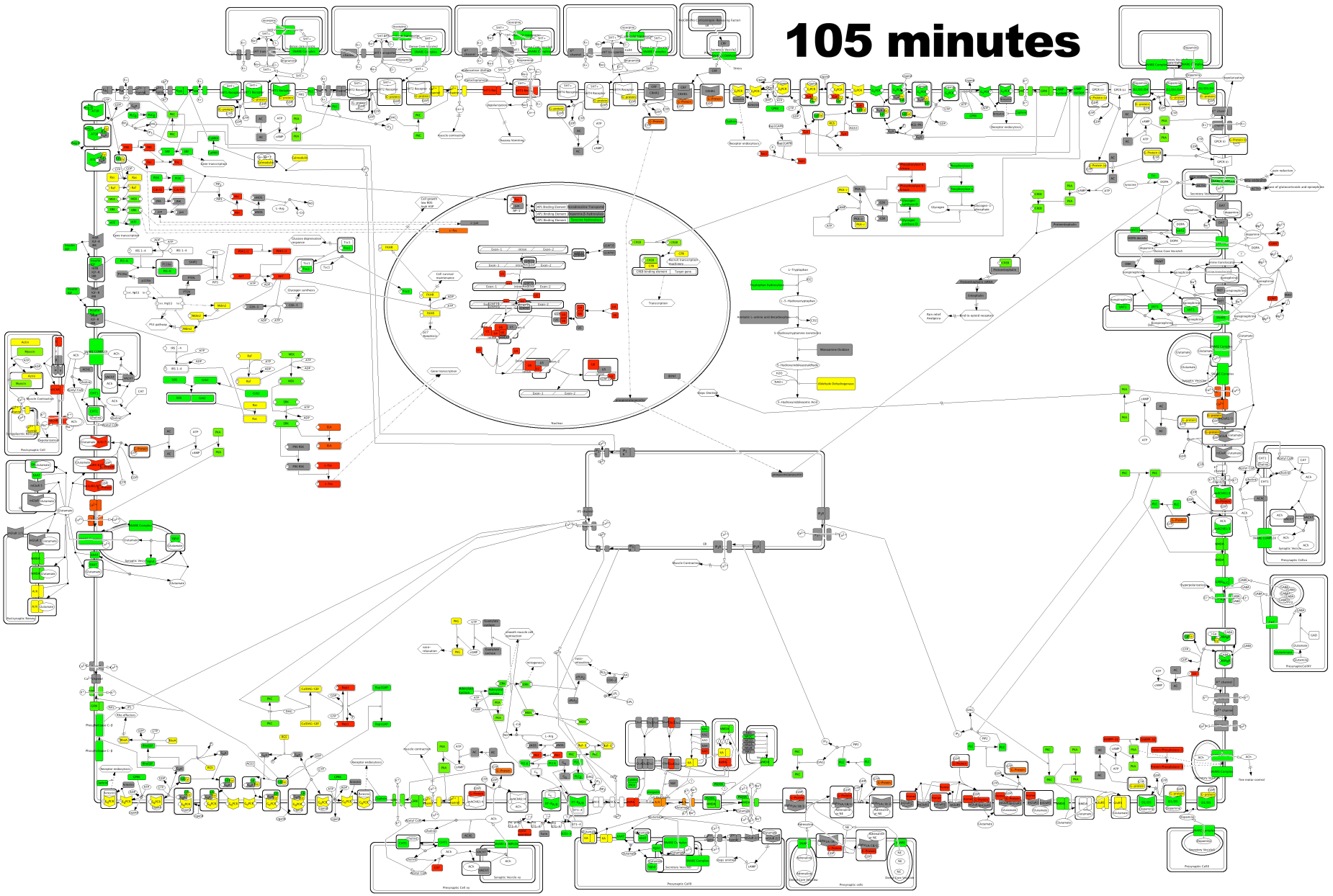
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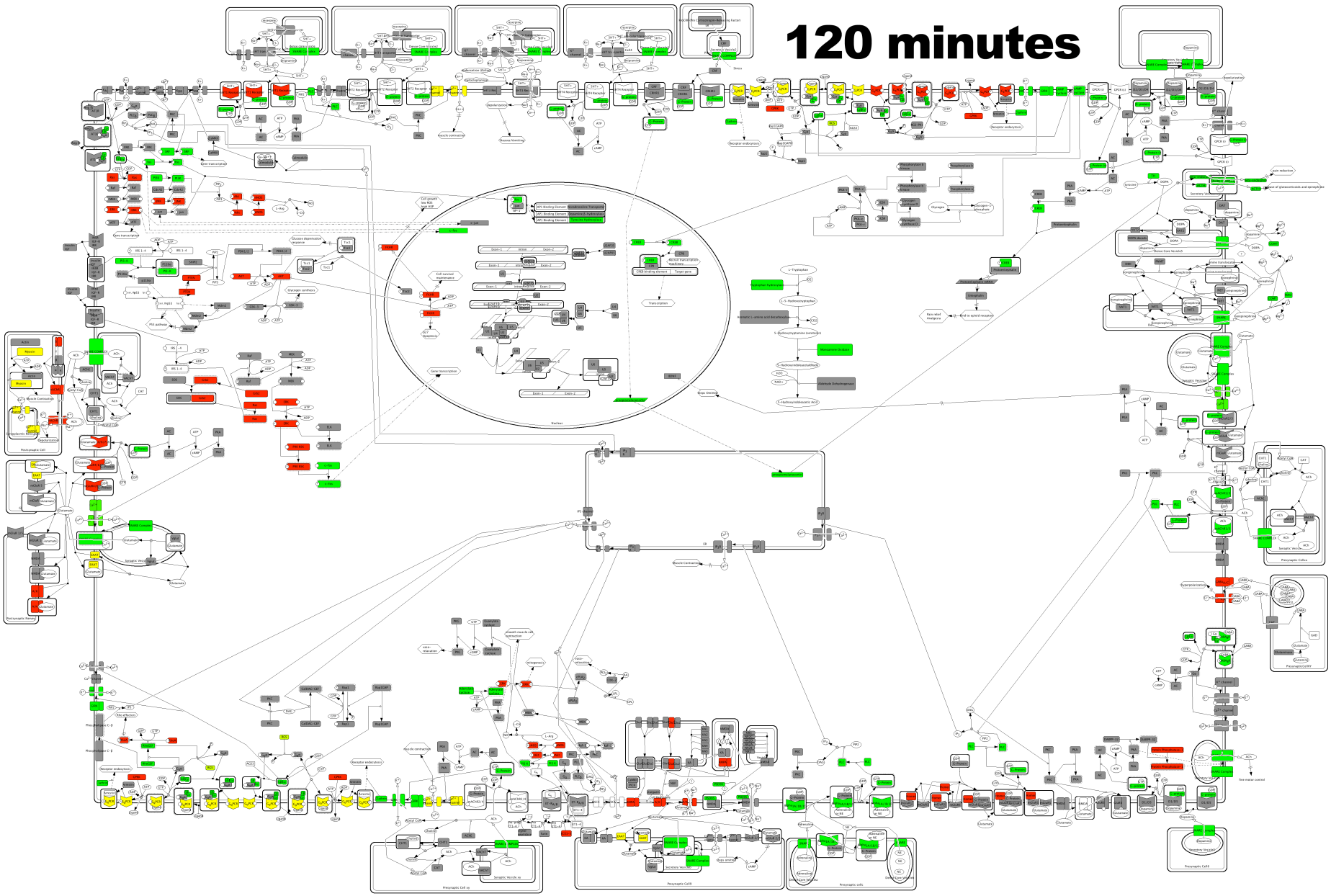
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Table 1 - Differentially Expressed Receptor List

60	75	105	90	120	Gene Name
-0.17			-0.24		5-hydroxytryptamine (serotonin) receptor 1A
			-0.34	0.41	5-hydroxytryptamine (serotonin) receptor 1D
			0.27		5-hydroxytryptamine (serotonin) receptor 3b
		-0.28			5-hydroxytryptamine (serotonin) receptor 7
	-0.25		0.20		Activin A receptor type II-like 1
0.32					Activin receptor IIB
	-0.21	-0.21			Adenosine A2B receptor
	-0.21	-0.16	0.37		Adenylate cyclase activating polypeptide 1 receptor 1
				-0.33	Adrenergic receptor, alpha 1b
	0.29		-0.32		Adrenergic receptor, alpha 2c
		0.36	-0.67		Adrenergic receptor, beta 2
		-0.62			Adrenomedullin receptor
-0.22	-0.34	-0.20			Advanced glycosylation end product-specific receptor
	0.36		-0.45		Angiotensin II receptor, type 1 (AT1A)
-0.15					Angiotensin receptor-like 1
			-0.28	-0.29	Arginine vasopressin receptor 1A
		-0.33	1.15		Aryl hydrocarbon receptor
		0.64	0.34		Aryl hydrocarbon receptor nuclear translocator
			0.52		Aryl hydrocarbon receptor nuclear translocator-like
			-0.29		Asialoglycoprotein receptor 2
		0.32			Benzodiazepine receptor, peripheral
		0.31		0.34	Cadherin EGF LAG seven-pass G-type receptor 2
0.45					Calcitonin gene-related peptide-receptor component protein
0.51		-0.32	0.35		Calcitonin receptor-like
			0.31		Calcium-independent alpha-latrotoxin receptor homolog 3
-0.39		-0.26			Calcium-sensing receptor
		0.67			Cannabinoid receptor 1 (brain)
		-0.38			Chemokine (C-X-C motif) receptor 3
		-0.31			Chemokine (C-X-C motif) receptor 4
		0.12	-0.11		Chemokine orphan receptor 1
		-0.33	-0.49	-0.50	Cholinergic receptor, muscarinic 3
		-0.24			Cholinergic receptor, nicotinic, alpha polypeptide 4
-0.24		0.27			Cholinergic receptor, nicotinic, beta polypeptide 1 (muscle)
		-0.31			Cholinergic receptor, nicotinic, beta polypeptide 3
	-0.23	-0.17	0.17	0.18	Cholinergic receptor, nicotinic, delta polypeptide
	0.29				Cholinergic receptor, nicotinic, epsilon polypeptide
		0.19			Colony stimulating factor 1 receptor
		0.40			Colony stimulating factor 1 receptor
		-0.37			Complement component 3a receptor 1
-0.30			0.21	0.20	Complement component 5, receptor 1
	-0.50	-0.26			Complement receptor 2 (predicted)
0.25					Corticotropin releasing hormone receptor 1
			-0.60		Coxsackie virus and adenovirus receptor
		0.47	0.40	0.41	Coxsackie virus and adenovirus receptor-like 1
0.24		-0.23		-0.23	Diphtheria toxin receptor
		-0.21	-0.34		Discoidin domain receptor family, member 1
-0.26		-0.14		0.20	Discoidin domain receptor family, member 2 (predicted)
0.30		-0.29	-0.29		Dopamine receptor 1A
			-0.28		Dopamine receptor 2
-0.30	0.49	0.47	-0.31		Dopamine receptor 4
-0.22			-0.22		Endothelial differentiation, lysophosphatidic acid GPCR 4 (predicted)
0.25		0.26			Endothelial differentiation, lysophosphatidic acid GPCR 7 (predicted)
		0.36			Endothelial differentiation, lysophosphatidic acid GPCR, 2
0.40					Endothelial differentiation, sphingolipid GPCR, 8
	0.32	0.25	-0.23		Endothelin receptor type B
			-0.80		Eph receptor A6 (predicted)

Table 1 - Differentially Expressed Receptor List

60	75	105	90	120	Gene Name
0.53			-0.38		Eph receptor A7
-0.60				0.31	Eph receptor A8
			-0.31		Eph receptor B1
		-0.90			Epidermal growth factor receptor
0.39			-0.26		Epidermal growth factor receptor pathway substrate 15
-0.39					Epidermal growth factor receptor pathway substrate 8 (predicted)
		0.18	0.17		Erythropoietin receptor
		0.32			Estrogen receptor 1
	0.28		-0.22		Fc receptor, IgG, alpha chain transporter
			-0.33		Fc receptor, IgG, high affinity I
		0.28			Fc receptor, IgG, low affinity IIb
		-0.29			FGF receptor activating protein 1
-0.24		-0.18			Fibroblast growth factor receptor 3
-0.39		-0.31		-0.37	Fibroblast growth factor receptor 4
		-0.27			Fibroblast growth factor receptor substrate 2 (predicted)
			-0.58		Fibroblast growth factor receptor substrate 3
-0.21				-0.23	Fibroblast growth factor receptor-like 1
			-0.23		Folate receptor 2 (fetal) (predicted)
-0.16		-0.15		0.20	G protein-coupled receptor 107 (predicted)
-0.34		-0.27			G protein-coupled receptor 116
		-0.27	-0.40		G protein-coupled receptor 125 (predicted)
	-0.61	-0.22			G protein-coupled receptor 149
			-0.58		G protein-coupled receptor 151
				-0.31	G protein-coupled receptor 155 (predicted)
		0.29	-0.39		G protein-coupled receptor 19
0.37	0.21				G protein-coupled receptor 27
-0.35			-0.35		G protein-coupled receptor 37
		-0.22		-0.15	G protein-coupled receptor 4
0.33			0.37		G protein-coupled receptor 43
		-0.26	-0.22		G protein-coupled receptor 48
-0.36	-0.30			0.19	G protein-coupled receptor 56
			0.32		G protein-coupled receptor 64
		0.35			G protein-coupled receptor 85
		0.37	-0.21		G protein-coupled receptor, family C, group 5, member B (predicted)
			0.25		G protein-coupled receptor, family C, group 5, member B (predicted)
0.64					G protein-coupled receptor, family C, group 5, member C
		-0.22			Galanin receptor 2
				-0.50	Gamma-aminobutyric acid (GABA) B receptor 1
-0.31			-0.41	0.33	Gamma-aminobutyric acid A receptor, alpha 5
0.31		-0.18			Glial cell line derived neurotrophic factor family receptor alpha 1
		-0.20			Glial cell line derived neurotrophic factor family receptor alpha 2
-0.17			-0.16		Glial cell line derived neurotrophic factor family receptor alpha 4
-0.29		-0.30	-0.24	-0.24	Glucagon receptor
0.28					Glutamate receptor, ionotropic, 2
0.36		-0.23			Glutamate receptor, ionotropic, AMPA1 (alpha 1)
0.24		0.43	0.45	0.50	Glutamate receptor, ionotropic, AMPA3 (alpha 3)
0.27			-0.29		Glutamate receptor, ionotropic, kainate 1
0.30		-0.21			Glutamate receptor, ionotropic, kainate 2
		0.46			Glutamate receptor, ionotropic, kainate 4
		-0.17	0.14		Glutamate receptor, ionotropic, kainate 5
0.18			-0.37		Glutamate receptor, ionotropic, NMDA2C
		0.50			Glutamate receptor, ionotropic, NMDA2D
0.52		-0.66			Glutamate receptor, ionotropic, N-methyl D-aspartate 1
0.43		-0.26			Glutamate receptor, ionotropic, N-methyl D-aspartate 2A
0.22					Glutamate receptor, ionotropic, N-methyl D-aspartate-like 1A
0.39		-0.45		0.33	Glutamate receptor, ionotropic, N-methyl-D-aspartate 3A

Table 1 - Differentially Expressed Receptor List

60	75	105	90	120	Gene Name
-0.44		-0.42			Glutamate receptor, metabotropic 2
		0.61	0.23	0.37	Glutamate receptor, metabotropic 4
		-0.15			G-protein coupled receptor 88
-0.21			-0.25		G-protein-coupled receptor GPR34
			-0.21		Granulocyte-macrophage colony stimulating receptor alpha
		0.78			Growth factor receptor bound protein 2
		0.21	0.32		Growth factor receptor bound protein 7
		0.19	0.23		Growth hormone receptor
		-0.41	-0.63		Histamine receptor H3
	-0.24	-0.38	-0.32		Hypocretin (orexin) receptor 1
		0.21			Insulin-like growth factor 1 receptor
		-0.26	0.12		Integrin beta 1 (fibronectin receptor beta)
0.26					Interferon gamma receptor 1
			0.29		Interferon gamma receptor 2 (predicted)
0.21			-0.32		Interleukin 1 receptor accessory protein
-0.14		0.14		-0.22	Interleukin 1 receptor antagonist
		-0.19		-0.31	Interleukin 1 receptor, type II
		-0.15			Interleukin 1 receptor-like 1
1.27		-0.27	-0.42		Interleukin 1 receptor-like 1 ligand
	-0.36				Interleukin 11 receptor, alpha chain 1
		-0.39	-0.21		Interleukin 12 receptor, beta 2
		-0.30			Interleukin 13 receptor, alpha 2
-0.22	0.26				Interleukin 17 receptor C (predicted)
		-0.20	-0.42		Interleukin 2 receptor, γ (severe combined immunodeficiency)
			0.33		Interleukin 3 receptor, alpha chain
		-0.41	0.24		KDEL endoplasmic reticulum protein retention receptor 1
		0.40	0.42		KDEL endoplasmic reticulum protein retention receptor 3
0.29					Killer cell lectin-like receptor subfamily B, member 1A (mapped)
				-0.29	Killer cell lectin-like receptor, family E, member 1
		-0.26	0.34		Lamin B receptor
0.26		-0.33			Leptin receptor
-0.29		0.22			Leptin receptor overlapping transcript-like 1
		0.72		0.34	Leukemia inhibitory factor receptor
0.30					Leukocyte immunoglobulin-like receptor, subfamily B, member 3
		-0.57			Leukocyte receptor cluster (LRC) member 8
		-0.30			Leukotriene B4 receptor
			0.36		Linker of T-cell receptor pathways
		-0.73			Low density lipoprotein receptor
				0.32	Low density lipoprotein receptor-related protein 1
	0.27	-0.38			Low density lipoprotein receptor-related protein 11 (predicted)
	0.20	-0.18			Low density lipoprotein receptor-related protein 3
				-0.53	Low density lipoprotein receptor-related protein 4
-0.34		-0.37			Low density lipoprotein receptor-related protein 6 (predicted)
0.24		-0.26	0.28	-0.19	Luteinizing hormone/choriogonadotropin receptor
		-0.41			Macrophage inflammatory protein-1 alpha receptor gene
	-0.29	-0.18		-0.27	Mammary tumor virus receptor 2
0.21			0.19		Mannose receptor, C type 2 (predicted)
0.65		0.54			Natriuretic peptide receptor 1
		-0.29			Natriuretic peptide receptor 2
		-0.35	-0.18	-0.22	Natriuretic peptide receptor 3
		-0.29			Natural cytotoxicity triggering receptor 3
0.32		0.24	-0.29		Nerve growth factor receptor (TNFR superfamily, member 16)
0.32		-0.67			Neuromedin B receptor
0.23					Neuronal pentraxin receptor
			0.27		NMDA receptor-regulated gene 1 (predicted)
0.31		0.17			Nuclear receptor binding factor 1

Table 1 - Differentially Expressed Receptor List

60	75	105	90	120	Gene Name
		-0.36			Nuclear receptor binding SET domain protein 1 (predicted)
				0.30	Nuclear receptor coactivator 1 (predicted)
	0.24				Nuclear receptor coactivator 2
				0.48	Nuclear receptor coactivator 3
			-0.28		Nuclear receptor coactivator 4
		-0.25	0.29		Nuclear receptor coactivator 5 (predicted)
0.30					Nuclear receptor coactivator 6
0.28			0.39		Nuclear receptor co-repressor 1
-0.22			-0.24		Nuclear receptor subfamily 0, group B, member 2
	-0.23				Nuclear receptor subfamily 1, group D, member 1
		0.34	0.23		Nuclear receptor subfamily 1, group D, member 2
			0.40		Nuclear receptor subfamily 1, group H, member 2
		-0.48			Nuclear receptor subfamily 1, group H, member 3
			-0.34		Nuclear receptor subfamily 1, group H, member 4
		-0.44		-0.32	Nuclear receptor subfamily 2, group F, member 2
		-0.24			Nuclear receptor subfamily 2, group F, member 6
				0.19	Nuclear receptor subfamily 3, group C, member 1
	0.39	0.32			Nuclear receptor subfamily 4, group A, member 1
-0.39					Nuclear receptor subfamily 4, group A, member 2
0.29			-0.29		Nuclear receptor subfamily 4, group A, member 3
		-0.36			Nuclear receptor subfamily 5, group A, member 2
			0.28		Olfactory receptor 1280
	0.24		-0.21		Oncostatin M specific receptor
		-0.18			Opioid growth factor receptor
0.29		-0.24	0.45		Opioid receptor, sigma 1
	0.25	0.27			Opioid receptor-like
-0.24					Oxidized low density lipoprotein (lectin-like) receptor 1
		-0.19	-0.20		Parathyroid hormone receptor 1
		0.33	0.25		Peroxisome proliferative activated receptor γ coactivator-related 1
		-0.43	-0.16		Peroxisome proliferator activated receptor alpha
0.19					Peroxisome proliferator activated receptor delta
0.27					Peroxisome proliferator activated receptor, gamma
				0.33	Platelet derived growth factor receptor, alpha polypeptide
-0.22		0.23		0.20	Platelet-activating factor receptor
			0.27		Poliovirus receptor-related 2 (herpesvirus entry mediator B)
0.76					Poliovirus receptor-related 3 (predicted)
-0.29		0.33	0.26		Pre T-cell antigen receptor alpha
		0.66			Progesterone receptor membrane component 1
		0.29			Prolactin receptor
			0.33		Prostaglandin E receptor 1
0.17					Prostaglandin E receptor 1
			-0.38		Prostaglandin E receptor 2, subtype EP2
		-0.22			Prostaglandin F receptor
-0.29					Prostaglandin F2 receptor negative regulator
-0.35	-0.21				Protein C receptor, endothelial
				-0.30	Purinergic receptor P2X, ligand-gated ion channel 4
	-0.19	-0.23	0.28		Purinergic receptor P2X, ligand-gated ion channel, 1
		-0.41	0.25		Purinergic receptor P2X, ligand-gated ion channel, 2
		0.27			Purinergic receptor P2X, ligand-gated ion channel, 3
-0.20					Purinergic receptor P2X-like 1, orphan receptor
0.30		0.22			Purinergic receptor P2Y, G-protein coupled 2
		-0.16			Pyrimidinergic receptor P2Y, G-protein coupled, 6
		-0.50			RAR-related orphan receptor alpha (predicted)
-0.24			0.18		Reticulon 4 receptor
			0.20		Reticulon 4 receptor-like 2
		0.38			Retinoic acid receptor, alpha

Table 1 - Differentially Expressed Receptor List

60	75	105	90	120	Gene Name
		-0.35			Retinoid X receptor beta
		-0.35			Ryanodine receptor 1, skeletal muscle
		-0.17	-0.23		Ryanodine receptor 1, skeletal muscle
		0.28			Ryanodine receptor 1, skeletal muscle
0.34					Scavenger receptor class B, member 1
			0.28		Signal sequence receptor 4
				0.38	Signal sequence receptor, alpha
		0.17	-0.28	-0.49	Sortilin-related VPS10 domain containing receptor 3 (predicted)
	0.58	-0.25	0.23		Steroid receptor RNA activator 1
0.52				-0.31	Tachykinin receptor 1
-0.18		-0.28			Tachykinin receptor 3
			0.63		T-cell receptor beta chain
-0.26		0.14	-0.28		Thymic stromal-derived lymphopoietin, receptor
0.51				-0.49	Thyroid hormone receptor beta
0.25		-0.31	-0.15		Toll-like receptor 2
		-0.41	0.53		Toll-like receptor 3
-0.29		-0.25			Toll-like receptor 4
0.48		-0.43			Toll-like receptor 6
			-0.36		Toll-like receptor adaptor molecule 2 (predicted)
0.27					Transforming growth factor, beta receptor II
			-0.22		Transient receptor potential cation channel, subfamily C, member 2
-0.26		-0.12			Transient receptor potential cation channel, subfamily C, member 3
		-0.32			Transient receptor potential cation channel, subfamily C, member 4
			-0.34		Transient receptor potential cation channel, subfamily C, member 7
		-0.23			Transient receptor potential cation channel, subfamily M, member 3
0.27					Transient receptor potential cation channel, subfamily V, member 1
-0.17		-0.31	0.27		Triggering receptor expressed on myeloid cells 2 (predicted)
0.27		-0.31	0.38		Tumor necrosis factor receptor superfamily, member 19-like
-0.24					Tumor necrosis factor receptor superfamily, member 1a
		0.30		0.38	Tumor necrosis factor receptor superfamily, member 1b
-0.15		-0.22			Tumor necrosis factor receptor superfamily, member 4
	0.37		-0.56		Tumor necrosis factor receptor superfamily, member 5
0.39			0.43		Type 1 TNF receptor shedding aminopeptidase regulator
	-0.26				Very low density lipoprotein receptor
		0.32	-0.25		Xenotropic and polytropic retrovirus receptor 1 (predicted)

Table 2 - Differentially Expressed Calcium and Potassium Channels

60	75	90	105	120	Gene Name	Comment
		0.25			Calcium channel, voltage-dependent, alpha2/delta subunit 1	
-0.33	-0.39			-0.27	Calcium channel, voltage-dependent, beta 1 subunit	
0.26			0.29		Calcium channel, voltage-dependent, beta 2 subunit	
		0.61			Calcium channel, voltage-dependent, beta 3 subunit	
		-0.19			Calcium channel, voltage-dependent, beta 3 subunit	
			-0.24		Calcium channel, voltage-dependent, gamma subunit 1	
		-0.37			Calcium channel, voltage-dependent, gamma subunit 2	
0.53			*-0.59*		Calcium channel, voltage-dependent, gamma subunit 4	
0.26	0.39		**-0.31**	0.33	Calcium channel, voltage-dependent, L type, alpha 1D subunit	L type
0.29	0.37				Calcium channel, voltage-dependent, P/Q type, alpha 1A subunit	P/Q Type
		-0.10	-0.20		Calcium channel, voltage-dependent, T type, alpha 1G subunit	T type
	0.30	**0.57**	**0.21**	0.43	Calcium channel, voltage-dependent, T type, alpha 1H subunit	T type
-0.21	-0.27				K+ voltage-gated channel, subfamily S, 1	KV9.1
			-0.25		Potassium channel regulator 1	?
0.44					Potassium channel tetramerisation domain containing 13	?
			-0.45		Potassium channel tetramerization domain containing 10	?
				-0.29	Potassium channel, subfamily K, member 1	LEAK
			-0.39		Potassium channel, subfamily K, member 12	LEAK
0.25					Potassium channel, subfamily K, member 15	LEAK
		-0.16	-0.18		Potassium channel, subfamily K, member 2	LEAK
		-0.29			Potassium channel, subfamily V, member 1	LEAK
		-0.22			Potassium intermediate/small conductance Ca-activated channel, subfamily N, member 3	
		-0.16		0.18	Potassium inwardly rectifying channel, subfamily J, member 11	KIR6.2
0.56		0.22	-0.22	-0.25	Potassium inwardly-rectifying channel, subfamily J, member 12	Kir2.1
0.74					Potassium inwardly-rectifying channel, subfamily J, member 16	KIR5.1
	0.19				Potassium inwardly-rectifying channel, subfamily J, member 6	Kir3.2
			-0.48		Potassium inwardly-rectifying channel, subfamily J, member 6	Kir3.2
			0.39		Potassium large conductance calcium-activated channel, subfamily M, alpha member 1	KCa1.1
		0.23			Potassium large conductance calcium-activated channel, subfamily M, beta member 4	
		0.28	-0.68	-0.58	Potassium voltage gated channel, Shab-related subfamily, member 1	Kv2.1
	0.32	-0.24			Potassium voltage gated channel, Shal-related family, member 2	Kv4.2
	-0.49		-0.34		Potassium voltage gated channel, Shal-related family, member 3	Kv4.3M,Kv4.3L
			0.18		Potassium voltage gated channel, Shaw-related subfamily, member 1	KV3.1
0.42					Potassium voltage gated channel, Shaw-related subfamily, member 2	Kv3.2
		0.48			Potassium voltage-gated channel, delayed-rectifier, subfamily S, member 3	Kv9.3
0.33		-0.28	0.23		Potassium voltage-gated channel, shaker-related subfamily, beta member 2	KCa2.3
			-0.47		Potassium voltage-gated channel, shaker-related subfamily, member 1	Kv1.1
			0.57		Potassium voltage-gated channel, shaker-related subfamily, member 4	Kv1.4
				0.55	Potassium voltage-gated channel, subfamily G, member 3	Kv10.1, Kv6.3
		-0.26			Potassium voltage-gated channel, subfamily H (eag-related), member 1	Kv10.1
	-0.20		-0.16		Potassium voltage-gated channel, subfamily H (eag-related), member 2	Kv11.1
	-0.25	-0.36			Potassium voltage-gated channel, subfamily H (eag-related), member 6	Kv11.2
1.12		**1.12**			Potassium voltage-gated channel, subfamily Q, member 5	KV7.2

Table 6 - cAMP/PKA Pathway

60	75	90	105	120	Component	Gene Name
		0.267			Gsα	Similar to Guanine nucleotide-binding protein G(olf), α subunit
	0.356			-0.451	cAMP cyclase	Adenylate cyclase 9 (predicted)
		-0.268	-0.323		cAMP cyclase	Adenylyl cyclase 8
			-0.189	-0.242	cAMP cyclase	Adenylate cyclase 3
0.184					cAMP cyclase	Adenylate cyclase 5
		-0.202	-0.174		cAMP cyclase	Adenylate cyclase 4
0.414	-0.403	-0.258	-0.383		PKA	Protein kinase, cAMP dependent regulatory, type I, alpha
0.282		-0.273	-0.267		PKA	Protein kinase, cAMP-dependent, regulatory, type 2, alpha
			-0.525		PKA	Protein kinase, cAMP dependent regulatory, type I, beta
			-0.331		PKA	Sperm autoantigenic protein 17
		-0.520			PKA	Protein kinase, cAMP dependent regulatory, type II beta
0.249			-0.198		CREB	CAMP responsive element binding protein 1
		0.395			CREB	CAMP responsive element modulator
		0.274			CREB	Hypothetical gene supported by NM_133381
-0.532		-0.988	1.094		CREB	CAMP responsive element binding protein 3-like 4
		0.575	-0.248		CREB	Glucosidase beta 2
0.316		-0.461	0.606		CREB	CAMP responsive element binding protein 3-like 1
		-0.343		-0.415	CREB	CAMP responsive element binding protein 3-like 2
-0.220		0.162			CREB	CAMP responsive element binding protein 3-like 3
0.291	0.365				Ca2+ channel	Calcium channel, voltage-dependent, P/Q type, α1A subunit
-0.332	-0.390			-0.268	Ca2+ channel	Calcium channel, voltage-dependent, β1 subunit
0.258			0.292		Ca2+ channel	Calcium channel, voltage-dependent, β2 subunit
		-0.185			Ca2+ channel	Calcium channel, voltage-dependent, β3 subunit
		0.247			Ca2+ channel	Calcium channel, voltage-dependent, α2/δ subunit 1
0.262	0.387		-0.314	0.328	Ca2+ channel	Calcium channel, voltage-dependent, L type, α1D subunit

Table 7 - PI3K Pathway

60	75	90	105	120	Component	Gene Name
		0.931			PI3 Kinase	Phosphatidylinositol 3-kinase catalytic delta polypeptide (predicted)
		0.427			PI3 Kinase	Phosphatidylinositol 3-kinase, regulatory subunit, polypeptide 2
			-0.283	-0.297	PI3 Kinase	Phosphatidylinositol 3-kinase, regulatory subunit, polypeptide 1
		0.158			PI3 Kinase	Phosphoinositide-3-kinase, class 2, beta polypeptide (predicted)
		0.294			PI3 Kinase	Phosphoinositide-3-kinase, class 3
	0.275		-0.154		PI3K	Phosphatidylinositol 4-kinase, catalytic, beta polypeptide
0.435					PI3K	Ataxia telangiectasia mutated homolog (human) (mapped)
0.265					PI3K	Similar to Expressed sequence BB220380
		0.229		0.435	PTEN	Phosphatase and tensin homolog
-0.238		0.166	0.273	0.186	PKB	Thymoma viral proto-oncogene 2
	0.237	0.246			PKB	Thymoma viral proto-oncogene 1
0.294		-0.562			eNOS	Nitric oxide synthase 1, neuronal
0.281				0.320	eNOS	Nitric oxide synthase 3, endothelial cell
		-0.666			Cdc42	Cell division cycle 42 homolog (S. cerevisiae)
		0.400			Cdc42	Similar to Phosphatidylinositol glycan, class F
		0.299			Cdc42	Ras homolog gene family, member J
		0.307			Cdc42	Ras-related C3 botulinum toxin substrate 1
			0.263		Cdc42	RAS-related C3 botulinum substrate 2
				0.409	JNK1/2	Mitogen-activated protein kinase 8
-0.177					JNK1/2	Mitogen activated protein kinase 10
-0.672		0.446			jun	Jun oncogene
	-0.301	-0.188			GSK-3β	Glycogen synthase kinase 3 alpha
			0.498		Mdm2	Transformed mouse 3T3 cell double minute 4
			-0.380		Mdm2	Transformed mouse 3T3 cell double minute 2 (predicted)
			-0.337		Tsc2	Tuberous sclerosis 2
0.342	0.216		-0.216		FKHRL1	Forkhead box P1
-0.450		0.367	0.523		FKHRL1	Forkhead box D3
	0.342	0.478	-0.299		FKHRL1	Checkpoint suppressor 1 (predicted)
	0.269		-0.347		FKHRL1	Similar to Fas apoptotic inhibitory molecule 1 (rFAIM)
		-0.378	-0.306		FKHRL1	Similar to ribosomal protein S27a
		0.179			FKHRL1	Fas apoptotic inhibitory molecule
		-0.307	0.400		FKHRL1	Forkhead box G1
			-0.271		FKHRL1	Forkhead box K2 (predicted)
		0.538			FKHRL1	Forkhead box O3 (predicted)
		-0.537			FKHRL1	Forkhead box M1
			0.359		FKHRL1	Forkhead box O1A
		-0.193			FKHRL1	Serine/cysteine proteinase inhibitor, clade A (α-1 antiproteinase, antitrypsin), member 1
			0.653		NFκB	Similar to nuclear factor kappa B subunit p100
		-0.393			NFκB	Nuclear factor of kappa light chain gene enhancer in B-cells inhibitor, β
			-0.716		NFκB	Nuclear factor of kappa light chain gene enhancer in B-cells inhibitor, α
		0.371	-0.310		NFκB	B-cell leukemia/lymphoma 3 (predicted)

Table 8 - PKC Pathway

60	75	90	105	120	Component	Gene Name
-0.238	0.236	0.247			$G_q\alpha$	Guanine nucleotide binding protein, alpha 11
		0.410			$G_q\alpha$	Guanine nucleotide binding protein, alpha q polypeptide
		-0.150			PLC	Phospholipase C, beta 3
			-0.196		PLC	Phospholipase C, beta 4
-0.310				-0.549	PLC$\beta\gamma$	Phospholipase C, epsilon 1
		-0.453			PLC$\beta\gamma$	Phospholipase C, delta 1
0.436		0.152			PLC$\beta\gamma$	Phospholipase C, delta 4
	0.176				PLC$\beta\gamma$	Phospholipase C-like 2 (predicted)
	-0.183	-0.286			PKC	Protein kinase C, beta 1
-0.324		-0.265			PKC	Protein kinase C, eta
			-0.479		PKC	Protein kinase C, zeta
-0.323					PKC	Protein kinase C, epsilon
0.262		-0.289			PKC	Protein kinase C, delta
		0.255			PKC	Protein kinase C, gamma
			-0.339		CaMKII	Calcium/calmodulin-dependent protein kinase II gamma
		0.445			CaMKII	Calcium/calmodulin-dependent protein kinase II, delta
		0.871	0.583	0.866	CaMK	Double cortin and Ca2+/calmodulin-dependent kinase-like 1
			-0.373		CaMK	P55 protein
		-0.206	0.267		Calmodulin	Calmodulin 2
		0.303			Calmodulin	Calmodulin 3
-0.332	-0.390			-0.268	Ca2+ channel	Calcium channel, voltage-dependent, beta 1 subunit
		-0.185			Ca2+ channel	Calcium channel, voltage-dependent, beta 3 subunit
0.291	0.365				Ca2+ channel	Calcium channel, voltage-dependent, P/Q type, α1A subunit
0.258			0.292		Ca2+ channel	Calcium channel, voltage-dependent, beta 2 subunit
		0.247			Ca2+ channel	Calcium channel, voltage-dependent, α2/δ subunit 1
0.262	0.387		-0.314	0.328	Ca2+ channel	Calcium channel, voltage-dependent, L type, α1D subunit
			-0.476		GIRK	Potassium inwardly-rectifying channel, subfamily J, member 6
	0.290		0.418		Fyn kinase	SH3-domain binding protein 4
		0.215	0.324		Fyn kinase	Yamaguchi sarcoma viral (v-yes-1) oncogene homolog
		0.456			Fyn kinase	Rous sarcoma oncogene
-0.408					Fyn kinase	Fyn proto-oncogene
		-0.348	0.494	-0.378	c-Fos	FBJ murine osteosarcoma viral oncogene homolog
			-0.170	-0.298	SRF	Similar to serum response factor

Table 9 - MAPK Pathway

60	75	90	105	120	Component	Gene Name
0.380		0.152	0.370		Ras-GDP	RAB8B, member RAS oncogene family
		1.032	0.663		Ras-GDP	RAB1, member RAS oncogene family
		0.335			Ras-GDP	RAB10, member RAS oncogene family
		0.585			Ras-GDP	RAB28, member RAS oncogene family
		0.418			Ras-GDP	Kirsten rat sarcoma viral oncogene homologue 2 (active)
		0.419			Ras-GDP	Related RAS viral (r-ras) oncogene homolog 2
		0.269			Ras-GDP	RAB13, member RAS oncogene family
0.235	0.335	-0.138	-0.232		Ras	RAB25, member RAS oncogene family (predicted)
			0.947		Ras	RAB11B, member RAS oncogene family
			0.224		Ras	RAB11a, member RAS oncogene family
		0.492	-0.244		Raf-1	Properdin factor, complement (mapped)
		-0.282			Raf-1	V-raf oncogene homolog 1 (murine sarcoma 3611 virus)
			0.189		Raf-1	ELK1, member of ETS oncogene family
		-0.385	-0.254		MEKK1-5	Mitogen activated protein kinase kinase kinase 3 (predicted)
0.205		-0.129			MEKK1-5	Similar to Cerebral cavernous malformation 2 homolog
		-0.535			MEKK	Protein kinase, lysine deficient 1
		0.735			MEK1-2	Mitogen activated protein kinase kinase 1
			-0.384		MEK	Mitogen activated protein kinase kinase 3
			-0.360		MEK	Mitogen-activated protein kinase kinase 6
	-0.320	-0.370	0.298		MAPKAPK2/3	Mitogen-activated protein kinase-activated protein kinase 3
0.335			-0.228		MAPK	Mitogen activated protein kinase 3
0.641		-0.247	0.205		MAPK	Mitogen-activated protein kinase 4
	-0.224	-0.214	-0.125		MAPK	Mitogen-activated protein kinase 7
-0.177					MAPK	Mitogen H5activated protein kinase 10
				0.409	MAPK	Mitogen-activated protein kinase 8
			0.298		MAPK	Mitogen activated protein kinase 14

Table 10 - SNARE Pathway

60	75	90	105	120	Component	Gene Name
		-0.445			SNARE Complex	Vesicle-associated membrane protein 8
			-0.506		SNARE Complex	Vesicle-associated membrane protein 2
			-0.332	-0.383	SNARE Complex	Vesicle-associated membrane protein 1
		-0.283			SNARE Complex	Synaptosomal-associated protein 29
		-0.210			SNARE Complex	Vesicle transport interactioning w/ t-SNAREs homolog 1A (yeast)
	-0.195	-0.404			SNARE Complex	Epimorphin
	0.261	0.300			SNARE Complex	Syntaxin 4A (placental)
0.286		0.238			SNARE Complex	Syntaxin 3
		0.604			SNARE Complex	Syntaxin 12

Table 11 - Primers

Gene Name	Forward Primer	Reverse Primer
ADCY8	TGCCAGAGTTGCTGTTCTCA	CAACCCAACCCATTCATCTT
ADMR	CTGTGTGGCCCTCTTAGACA	CTGGCTTGTTCAGGGTCAAT
ADRA2C	TATCTCTCCTCCCCCAGACA	GAGCTCAGACAACTGCACCA
AGTR1	TGGACTTGGGTAACACTGCT	TCAAGTTTCAGGACTCCTTTGT
CACNA1D	TGCGCTACCCTTCCAGTTTA	TCTGTGCAGCCGTTCTGA
CACNA1H	CCTCCCCTCAGCTTTGACTT	CATCCATTCCAGGCTGTTG
CNR1	CAATGATGCTACCAGTTCAACA	TCGCCTAGAGAGGAAACCTT
CRHR	CGTCAGTGAGCTTGCATCAT	CAGGACAAGCACTCCATCAG
GABRA5	ACCCAGGGTCCAGAAACAAT	CGCCCCAACACCTTTACAAC
GNA11	CTTGAGGGACAGGGACAGAA	CGTGAAGGACACCATCCTG
HCRTR1	ACAATGCCAACGAGATCCA	ACATAGCCAGCTGCACCAAT
HRH3	AAAGCATTCCTCCCAGGTGT	CCCCGTCTGTACAATCAGAA
KCNA4	CTGCTGGGCGCCTTATTT	CAGCAGCCGAATCTTTCAA
KRAS	AAAGGGAAGCCCATAAATCC	CCATCCCTACTCTGTGTTCCA
NPR1	CGAGTCACACGCTCAATGAT	ACCTGAGCTCCTGCGAATG
NPR3	CCCAATGTTGCTTTCTTCTTG	CTTGCAAATCATGTGGCCTA
P2RX2	AGCATGCTGCAACTTCTAAAGG	CCATCTCCTTTCCCAACAGA
PI3KR2	AGTGCAATACCAGCTCCTTCA	ATGGCGACACGAAGCACT
PIK3CD	CCACTTCATGACCCGACTG	CCTGAGCTTAGCTGCTCCAA
PKCRZ	ATTCCTCAGGGCATTACACG	CCCTACCAGAGGGTGAGACA
PLCB4	TTGAATTTCAGCCTTCATGG	ACCCGGTAGCCTAGGAGTCA
PLCD1	CACAGCTCCACTCACTCAGG	GCCATGTCCACCTCTTGTCT
PLCE1	TGCCTTTATTTCCAGCCAGA	CGGCCGCCTACTTGAGTTAT
PRKAR1A	ATGGCAACAAGGCAGCTTTC	CCTCCCTCCTTTCCCAGTTA
PRKCH	TGCCTTTATTTCCAGCCAGA	CGGCCGCCTACTTGAGTTAT
RAB1A	AACCAGTGTCTGTCAGTTTCCA	TCTGCAGCCACAAATTATATGC
RAB28	AACATCAGGTACAGTGTGATCG	CTGATCCTCCACATGGAATTT
RAB8A	CCAGGAAAGATTCCGAACAA	AGGCATGCTCTTCAATGTTTCT
STX12	CACAGCAGCCAGATCCTCTA	CTGCCCTTTTTCACAGACCT
STX3A	AGGCCAAGATTTCAGTGCAG	TATCAGGGTCAGGCTCGAAA
TACR1	CTTGCCTTCTCCAGGTATGC	CCGTGAACATCCTCATGGTT
VAMP2	CTCCTACCCTTTCACACCACA	GAACTAGGACCCCAAAGTTGC

Table 12 - qRT-PCR validation of Microarray Results

Minutes After Hypertensive Pulse	Gene	P-Value	Log Fold Change	qRT-PCR Direction	Microarray Direction
0	PRKAR1A	0.015	0.73	+	+
0	CRHR	0.002	1.40	+	+
0	HCRTR1	0.046	0.79	+	+
0	TACR1	0.004	0.41	+	+
0	CACN1D	< 0.001	2.78	+	+
0	GABRA5	0.014	0.86	+	-
0	PLCE1	< 0.001	0.60	+	-
0	PRKCH	< 0.001	0.90	+	-
30	ADCY8	0.001	-2.30	-	-
30	PLCD1	0.005	-2.12	-	-
30	HCRTR1	0.036	-0.24	-	-
30	NPR1	< 0.001	-2.79	-	-
30	P2RX2	0.007	-2.65	-	-
30	ADMR1	0.013	-1.83	-	-
30	HRH3	0.011	-2.58	-	-
30	GNA11	0.039	-2.39	-	+
30	RAB1A	0.003	-2.50	-	+
30	RAB28	0.037	-1.67	-	+
30	KRAS	0.001	-2.65	-	+
30	STX3	0.006	-2.74	-	+
30	CNR1	0.004	-2.27	-	+
30	CACNA1H	0.041	-2.23	-	+
30	STX12	0.094	-1.74		+
30	PI3KR2	0.108	-1.41		+
30	PIK3CD	0.058	-2.01		+
30	PRKCH	0.062	-2.05		-
30	PRKAR1A	0.090	-1.35		-
30	NPR3	0.098	0.37		-
45	ADCY8	0.009	-3.33	-	-
45	PRKA1A	< 0.001	-3.91	-	-
45	PLCB4	< 0.001	-4.99	-	-
45	PKCRZ	0.008	-3.45	-	-
45	VAMP2	0.005	-7.90	-	-
45	ADRA2C	0.007	-3.51	-	-
45	HCRTR1	0.025	-3.99	-	-
45	AGTR1	0.004	-3.19	-	-
45	GABRA5	0.001	-3.55	-	-
45	HRH3	0.030	-3.57	-	-
45	RAB1A	0.012	-4.00	-	+
45	RAB8A	< 0.001	-4.32	-	+
45	CACNA1H	0.042	-4.12	-	+
45	KCNA4	0.001	-3.62	-	+