

Supplementary data Table 1

Changes in aminopeptidases, amino acid transporters and tRNA synthetases at 4 hours and 24hours following CHR-2797 treatment.

Family	Gene	Accession no.	Probe Set	H929 4hrs	H929 24hrs	U266 24hrs
Aminopeptidases	leucine aminopeptidase 3	NM_015907	217933_s_at	1.63		
	leukotriene A4 hydrolase	J02959	208771_s_at			1.48
	PuSA	AW055008	201454_s_at			1.6
	X-prolyl aminopeptidase (aminopeptidase P) 1, soluble	AF195530	209045_at	1.59		
Amino acid transporters	ribosomal protein L24 /// SLC 36 (proton/amino acid symporter), 2	AI560573	214143_x_at	2.06		
	SLC 7 (cationic amino acid transporter, y+ system), 1	AA148507	212295_s_at	1.62		
	SLC 7 (cationic amino acid transporter, y+ system), 5	AB018009	201195_s_at			1.54
	SLC 7, (cationic amino acid transporter, y+ system) 11	AB040875	209921_at			3.23
	SLC 38, 2	AF298897	222982_x_at			1.64
	SLC 38, 2	NM_018976	220924_s_at			1.72
tRNA synthetases	asparaginyl-tRNA synthetase ///	NM_004539	200027_at			1.32
	asparaginyl-tRNA synthetase					
	arginyl-tRNA synthetase	NM_002887	201330_at	1.56		
	cysteinyl-tRNA synthetase	AI769685	212971_at	1.51	1.98	1.79
	glutamyl-prolyl-tRNA synthetase	NM_004446	200843_s_at			1.35
	glycyl-tRNA synthetase	D30658	208693_s_at			1.87
	histidyl-tRNA synthetase	NM_002109	202042_at	1.68		
	histidyl-tRNA synthetase 2	AL121780	234107_s_at			1.42
	isoleucine-tRNA synthetase	NM_013417	204744_s_at	2.02	1.82	1.4
	mitochondrial isoleucine tRNA synthetase	NM_018060	217900_at	1.55		
	lysyl-tRNA synthetase	NM_005548	200840_at	1.47		
	phenylalanine-tRNA synthetase-like, beta subunit	AF161521	223035_s_at	1.44		
	threonyl-tRNA synthetase	NM_003191	201263_at			1.31
	tryptophanyl-tRNA synthetase	NM_004184	200629_at			1.65

Supplementary data Table 2

Supervised analysis demonstrating the 49 genes that were upregulated in all 3 conditions (4hr H929, 24hours H929 and 24hours U266) following CHR-2797 treatment.

Family	Gene	Accession no.	Probe Set	H929 4hrs	H929 24hrs	U266 24hrs
Heat Shock	DnaJ (Hsp40) homolog, subfamily A, member 1	NM_001539	200881_s_at	1.55	1.55	2.06
	heat shock 90kDa protein 1, alpha	R01140	214328_s_at	2.13	1.6	1.47
Proteasome/ubiquitin pathway	proteasome (prosome, macropain) 26S subunit, ATPase, 1	NM_002802	204219_s_at	1.8	1.74	2.41
	proteasome (prosome, macropain) 26S subunit, ATPase, 2	NM_002803	201068_s_at	1.93	1.95	1.58
	proteasome (prosome, macropain) 26S subunit, non-ATPase, 1	NM_002807	201199_s_at	1.69	1.87	1.36
	proteasome (prosome, macropain) 26S subunit, non-ATPase, 12	AI446530	202352_s_at	1.9	1.52	1.48
	proteasome (prosome, macropain) subunit, alpha type, 1	NM_002786	201676_x_at	1.73	1.55	1.48
	proteasome (prosome, macropain) subunit, alpha type, 1 /// proteasome (prosome, macropain) subunit, alpha type, 1	BC005932	211746_x_at	1.62	1.63	1.88
	proteasome (prosome, macropain) subunit, alpha type, 2	NM_002787	201317_s_at	1.83	1.63	1.73
	proteasome (prosome, macropain) subunit, alpha type, 6	BC002979	208805_at	2.24	2.96	1.46
	proteasome (prosome, macropain) subunit, beta type, 2 /// proteasome (prosome, macropain) subunit, beta type, 2	NM_002794	200039_s_at	1.69	1.65	1.6
	proteasome (prosome, macropain) subunit, beta type, 4	NM_002796	202244_at	2.32	2.06	1.34
	proteasome (prosome, macropain) subunit, beta type, 7	NM_002799	200786_at	1.73	1.82	1.76
	proteasome regulatory particle subunit p44S10	NM_014814	202753_at	1.71	1.86	1.76
	sequestosome 1	NM_003900	201471_s_at	2.79	4.22	3.06
	ubiquitin specific protease 14 (tRNA-guanine transglycosylase)	NM_005151	201672_s_at	1.54	1.43	1.72
	tumor protein, translationally-controlled 1	BG498776	212284_x_at	2.35	1.49	1.39
Protein synthesis and transport	cysteinyl-tRNA synthetase	AI769685	212971_at	1.51	1.98	1.79
	Isoleucine-tRNA synthetase	NM_013417	204744_s_at	2.02	1.82	1.4
	Eukaryotic translation initiation factor 2, subunit 2 beta, 38kDa	BC000461	208726_s_at	1.46	1.72	1.35
	mitochondrial translational initiation factor 2	NM_002453	203095_at	1.66	1.53	1.35
	Chromatin modifying protein 4A	NM_014169	218571_s_at	1.66	1.87	1.31
Cell signalling	Myotrophin	AL533334	224656_s_at	2.25	1.77	1.26
	farnesyltransferase, CAAX box, alpha /// farnesyltransferase, CAAX box, alpha	BG168896	200090_at	1.59	1.48	1.3
	putative MAPK activating protein	NM_152902	1553677_a_at	1.61	2.12	1.68
	Ras homolog enriched in brain	NM_005614	201453_x_at	2	1.79	1.59
	SHC (Src homology 2 domain containing) transforming protein 1	AI091079	214853_s_at	1.46	1.59	1.75
	TAR DNA binding protein /// TAR DNA binding protein	NM_007375	200020_at	1.83	1.55	1.28
	tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, beta polypeptide	NM_014052	217718_s_at	1.56	1.77	1.74
	chromosome 20 open reading frame 24	NM_018840	217835_x_at	2.12	2.37	1.84
Protein binding	Coiled-coil-helix-coiled-coil-helix domain containing 3	NM_017812	217972_at	1.64	1.58	1.29
	NODAL modulator 2	AL512687	217225_x_at	1.43	1.47	1.41
	nucleosome assembly protein 1-like 1	NM_004537	204528_s_at	1.53	1.38	2.05
	Translocase of outer mitochondrial membrane 70 homolog A (yeast)	NM_014820	201519_at	1.79	1.46	1.7
	WD repeat domain 1	NM_017491	200609_s_at	1.8	1.59	1.67
Electron transport	ATP synthase, H+ transporting, mitochondrial F0 complex, subunit c (subunit 9), isoform 2	D13119	208764_s_at	2.2	2.22	1.32
	ATPase, Ca++ transporting, cardiac muscle, slow twitch 2	M23114	209186_at	2.08	1.88	1.52
	gb:NM_173709.1 /DB_XREF=gi:27754201 /GEN=MTND2 /TID=Hs2Affx.1.29 /CNT=1 /FEA=FLmRNA /TIER=FL /STK=1 /NOTE=sequence(s) not in UniGene /DEF=Homo sapiens NADH dehydrogenase 2 (MTND2), nuclear gene encoding mitochondrial protein, mRNA. /PROD=NADH dehydrogenase 2 /FL=gb:NM_173709.1	NM_173709	1553551_s_at	1.77	2.71	3.61
	NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 5, 16kDa	NM_002492	203621_at	1.53	1.57	1.46
	Thioredoxin reductase 1	NM_003330	201266_at	1.65	1.52	1.5
Misc	growth hormone inducible transmembrane protein	AF131820	209249_s_at	1.8	1.99	2.55
	annexin A2	NM_004039	201590_x_at	2.07	1.9	1.37
	N-glycanase 1	NM_018297	220742_s_at	1.55	1.61	2.1
	Potassium channel modulatory factor 1	NM_020122	217938_s_at	1.79	1.66	1.44

Neuroplastin	NM_017455	202228_s_at	1.88	1.71	1.52
zinc finger, A20 domain containing 2	AF062347	210275_s_at	1.67	1.57	2.31
chromosome 7 open reading frame 30	BG397444	226385_s_at	1.51	1.68	1.43
glioma tumor suppressor candidate region gene 2	NM_015710	217807_s_at	1.59	1.56	1.58
Golgi autoantigen, golgin subfamily a, 7	NM_016099	217819_at	1.58	1.57	1.56