

Appendix 1

Summary of the annotation of the chromosomal region 9q32 to 9q34.3. Putative paralogues are in bold text.

<i>Clone</i>		<i>Ensembl Symbol</i>	<i>SPTR, Refseq or Ensembl entry</i>	<i>Transcript Start</i>	<i>Transcript end</i>	<i>Protein length (aa)</i>	<i>Description</i>
AL160275	q32	ATP6V1G1	O75348	109082196	109092823	118	Vacuolar ATP synthase subunit
	q32	NM_153045	Q8ND43	109118880	109140873	281	Unknown
AL390240	q32	TNFSF15	O95150	109283763	109300582	251	Tumor necrosis factor ligand
AL133412	q32	TNFSF8	P32971	109398384	109424753	234	Tumor necrosis factor ligand
AL162425	q33.1	TNC	P24821	109514975	109612609	2201	Tenascin precursor
AL355601	q33.1	NM_017418	O17418	109636267	109897093	95	Deleted in esophageal cancer 1
AL731824	q33.1	No genes					
AL714001	q33.1	No genes					
AL691420	q33.1	No genes					
AL731897	q33.1	No genes					
AL731813	q33.1	No genes					
AL732367	q33.1	EST-YD1	Q9P2X8	110398837	110399090	84	EST-YD1 protein
AL691426	q33.1	No genes					
AL353141	q33.1	No genes					
AL137024	q33.1	PAPPA	Q13219	110677328	110808083	716	Pregnancy associated plasma protein A
AL669963	q33.1	No genes					
AL133282	q33.1	ASTN2	O75129	110836698	111823883	1321	Astrotactin 1
	q33.1	Novel	ENSG00000179990	110963536	110981401	73	Unknown
AL133284	q33.1	TRIM32	Q13049	111098800	111112220	653	Zing finger protein HT2A
AL157829	q33.1	Novel	ENSG00000136913	111196159	111196227	23	Unknown
	q33.1	FLJ20958	Q9BQ00	111205755	111205826	24	Unknown
AL392085	q33.1	No genes					
AL354981	q33.1	No genes					
AL355608	q33.1	No genes					
AL358792	q33.1	No genes					
AL445644	q33.1	No genes					
AL161630	q33.1	Novel	ENSG00000179956	112057445	112065871	72	Unknown
AL160272	q33.1	TLR4	O00206	112113140	112124614	839	TOLL-like receptor 4 precursor
AL354754	q33.1	No genes					
AL445663	q33.1	No genes					
AL158831	q33.1	No genes					
AL365195	q33.1	No genes					
AL445440	q33.1	No genes					
AL355592	q33.1	No genes					
AL589703	q33.1	No genes					

AL157780	q33.1	No genes					
AL512602	q33.1	No genes					
AL445310	q33.1	No genes					
AL353773	q33.1	DCBBR1	O14618	113575169	113778264	761	Deleted in bladder cancer chromosome region
AL138894	q33.1	No genes					
AL353630	q33.1	No genes					
AC006288	q33.1	No genes					
AL445683	q33.1	No genes					
AL354931	q33.1	No genes					
AL441989	q33.1	No genes					
AL355589	q33.1	No genes					
AL592549	q33.1	No genes					
AL353736	q33.1	No genes					
AL391870	q33.2	CDK5RAP2	Q9NV90	114797706	114988994	943	CDK5 regulatory subunit associated protein 2
AL590642	q33.2	No genes					
AL138836	q33.2	EGFL5	Q9H1U4	115009649	115068409	401	EGF like domain multiple 5 protein
	q33.2	Novel	ENSG00000176341	115098762	115122988	236	Unknown
AL161911	q33.2	FBXW2	Q9UKT8	115160814	115202253	454	F-BOX/WD-repeat protein 2
	q33.2	PSMD5	Q16401	115224889	115251748	504	26S proteasome non-ATPase regulatory subunit 5
	q33.2	Novel	ENSG00000180095	115251902	115263209	105	Unknown
AL354792	q33.2	Q9UFS9	Q9UFS9	115264535	115286029	473	Transcription factor
AC006430	q33.2	PRO1995	Q9P1F7	115299108	115300075	105	Unknown
	q33.2	TRAF1	EBI6	115311227	115337603	350	TNF receptor associated factor 1
	q33.2	C5	P01031	115361172	115491110	1676	Complement C5 precursor
AL137068	q33.2	Novel	ENSG00000171635	115499108	115516745	219	Testis specific
	q33.2	CEP1	O07018	115521379	115586444	1800	Centrosomal protein 1
	q33.2	RAB14	P35287	115586971	115610724	215	Ras-related protein
AL513122	q33.2	Novel	ENSG00000180552	115647510	115648753	409	Unknown
	q33.2	MOST2	Q9NRJ2	115689602	115694364	209	MOST2 protein
	q33.2	GSN	O06396	115708681	115741676	782	Gelolin precursor, plasma
AL161784	q33.2	EPB72	P27105	115747913	115779060	288	Erythrocyte band 7 integral membrane protein
AL359644	q33.2	Novel	ENSG00000165196	115868813	115888025	174	Unknown
AL357936	q33.2	No genes					
AL365274	q33.2	DAP2IP	Q8TDL2	115974718	116194365	964	DOC-2/DAB2 interactive protein
AL450285	q33.2	Novel					
AL596244	q33.2	Novel					
AL445587	q33.2	Novel	ENSG00000171539	116362696	116383814	140	Unknown
AL442634	q33.2	Q8NHH0	Q8NHH0	116397745	116502441	538	Unknown
AL162423	q33.2	NDUFA8	P51970	116552893	116568579	172	NADH-Ubiquinone oxidoreductase subunit
AL162424	q33.2	LHX6	Q9UPM6	116611414	11667540	363	LIM/Homeobox protein
	q33.2	NM_033117	Q96H35	116648845	11667367	190	Unknown
	q33.2	NM_138777	Q9BU92	116679683	116732299	262	RIKEN cDNA D02
	q33.2	PTGS1	P23219	116779785	116804538	596	Prostaglandin G/H synthase 1 precursor
AL359636	q33.2	OR	Q8NGS3	116885796	116886761	322	Olfactory receptor
		OR	OR1J5	116919637	116920575	313	Olfactory receptor
		OR	Q8NGS1	116927976	116928914	313	Olfactory receptor
		OR	OR1N1	116935199	116936125	309	Olfactory receptor
		OR	Q8NGR9	116960247	116962994	316	Olfactory receptor
		OR	Q8NGR8	116976386	116977312	309	Olfactory receptor
A1162254	q33.2	OR	Q9UDD7	117016871	117017632	254	Olfactory receptor
		OR	OR1Q1	117023573	117024514	314	Olfactory receptor
AC006313	q33.2	OR	Q8NGR6	117037417	117038367	295	Olfactory receptor
		OR	Q8NH94	117070551	117071480	317	Olfactory receptor
		OR	Q8NH93	117083965	117084936	324	Olfactory receptor
		OR	Q8NGR5	117132825	117133757	311	Olfactory receptor

		OR	Q96R80	117158887	117159534	216	Olfactory receptor
		OR	Q8WVK7	117170703	117171065	121	Olfactory receptor
AL359512	q33.2	OR	Q8NGR3	117208958	117209905	316	Olfactory receptor
	q33.2	PDCL	Q13371	117226985	117237466	301	Phosducin-like protein
	q33.2	MNAB	O18835	117253391	117314050	1191	Membrane associated binding protein
AL731645	q33.2	ZID	Q15916	117317457	117320910	424	Zinc finger protein
	q33.2	BIOR	Q9HCK0	117326928	117340094	441	Zinc finger protein
	q33.2	GAPCenA	Q9Y3P9	117349852	117513707	997	RAB6 GTPase activating protein
AL358946	q33.3	No genes					
AL365338	q33.2	NM_030814	Q9H2N8	117518337	117522309	167	Unknown
	q33.2	STRBP	Q96S19	117533552	117593141	658	RNA binding protein
AL365504	q33.3	PRO226	Q9P180	117674928	117675167	80	Unknown
AL445489	q33.3	FLJ38464	Q8N930	117782642	117787587	215	Unknown
	q33.3	FLJ00224	Q8TEH3	117788495	118338969	896	Unknown
AL161790	q33.3	No genes					
AL390774	q33.3	No genes					
AL158208	q33.3	No genes					
AC006450	q33.3	LHX2	P50458	118420439	118441992	406	LIM/Homeobox protein
AL158052	q33.3	No genes					
AI445284	q33.3	No genes					
AL162724	q33.3	NEK6	Q9HC98	118666435	118761271	338	Serine-threonine protein kinase
AL137846	q33.3	PSMB7	Q99436	118762294	118824271	277	Proteasome subunit beta type 7
	q33.3	Q8NH12	Q8NH12	118874053	118892161	984	Seven transmembrane helix receptor
AL354979	q33.3	NR5A1	Q13285	118890062	118916249	461	Steroidogenic factor 1
	q33.3	NR6A1	Q15406	118928956	119180139	476	Orphan nuclear receptor
AL669818	q33.3	No genes					
AL158075	q33.3	No genes					
AL354928	q33.3	FLJ90228	Q8NCI9	119186100	119223707	318	Unknown
	q33.3	Novel	ENSG00000136918	119263034	119266399	233	Unknown
	q33.3	RPL35	P42766	119266713	119270796	141	60S ribosomal protein L35
	q33.3	NM_030978	Q9BPX5	119278120	119286561	159	Actin related protein
	q33.3	GOLGA1	Q92805	119287196	119349928	767	Golgin 97,gap junction protein
AL451125	q33.3	FLJ40705	Q8N1I4	119360938	119552351	629	Unknown
AL445930	q33.3	PPP6C	O00743	119557957	119598620	305	Serine/threonine protein phosphatase 6
	q33.3	Novel	ENSG00000173602	119603477	119604650	282	40S ribosomal protein
AL354710	q33.3	P40	O00568	119609374	119642831	372	RAB9 effector P40
	q33.3	HSPA5	P11021	119643682	119650159	654	78 KDA Glucose regulated protein
	q33.3	Novel	ENSG00000176094	119672414	119672919	158	40S ribosomal protein
AL627223	q33.3	FLJ20119	Q9NXQ1	119670661	119773833	833	Unknown
AL359632	q33.3	MAPKAP1	Q9BPZ7	119846225	120116031	486	MAP kinase interacting protein 1
AL162584	q33.3	Novel	ENSG00000178022	120004502	120005454	316	Unknown
AL358074	q33.3	SIN1		119846225	120116031	522	SAPK interacting protein 1
	q33.3	NM_016158	Q9UN39	120153187	120155380	129	Erythrocyte transmembrane protein
AL627303	q33.3	No genes					
AL445186	q33.3	PBX3	P40426	120156161	120376205	434	Pre-B-cell leukaemia transcription factor 3
AL589923	q33.3	No genes					
AL445664	q33.3	No genes					
AL162391	q33.3	No genes					
AC006443	q33.3	FLJ00022	Q9H7P6	120735668	120915859	344	Unknown
AL356309	q33.3	No genes					
AL161908	q33.3	No genes					
AL161731	q33.3	LMX1B	O60663	121023337	121105270	379	LIM/Homeobox protein
	q33.3	Q8N243	Q8N243	121212014	121214492	115	Unknown
	q33.3	ZNF297B	O43298	121213845	121244041	467	Zinc finger 297B
AL354944	q33.3	KIAA1993	Q8NCN2	121269484	121289729	532	Unknown

AL160169	q33.3	No genes					
AL356862	q33.3	RalGPS1A	Q8WUV7	121323592	121631982	590	Ral guanine nucleotide factor
	q33.3	ANGPTL2	Q9UKU9	121496150	121531456	493	Angiotensin-converting enzyme 2
AL357623	q33.3	No genes					
AL450263	q33.3	Novel	ENSG00000176889	121633429	121650133	78	Unknown
	q33.3	NM_032293	Q9BQH6	121673400	121802357	802	Unknown
AL445222	q33.3	SLC2A8	Q9NY64	121806004	121816716	477	Solute carrier family 2
	q33.3	RPL12	P30050	128564940	121860226	164	60S ribosomal protein L12
	q33.3	FLJ31641	Q96MZ7	121860323	121912317	696	Unknown
	q33.3	Novel	ENSG00000176217	121901370	121904622	109	Unknown
	q33.3	NBL_HUMAN	Q96TA1	121914157	121987798	733	Niban-like protein.
AL390116	q33.3	No genes					
AL162426	q34.11	STXBP1	Q64320	122021098	122101525	594	Syntaxin binding protein 1
	q34.11	Novel	ENSG00000160401	122108029	122124506	785	Unknown
	q34.11	FLJ00176	Q8TEL7	122124875	122140409	867	Unknown
	q34.11	TOR2A	Q96LSL7	122140333	122144087	253	Torsin family 2, member A
	q34.11	SH2D3C	Q9Y2X5	122147126	122187504	703	SH2 Domain containing protein 3
AL162586	q34.11	CDK9	P50750	122194861	122198896	372	Cell division protein kinase 9
	q34.11	Novel	ENSG00000177953	122199888	122201861	85	Unknown
	q34.11	FPGS	Q05932	122211733	122222873	587	Folypolyglutamate synthase
	q34.11	FLJ33157	Q96LW6	122225388	122225972	195	Unknown
	q34.11	ENG	P17813	122224494	122263514	658	Endoglin precursor
AL157935	q34.11	AK1	P00568	122275199	122286472	194	Adenylate kinase isoenzyme 1
	q34.11	FLJ13838	Q9H8A2	122294130	122308407	352	Beta-N-Acetylgalactosaminide
	q34.11	SIAT7D	Q9H4F1	122316695	122325831	298	Sialyltransferase
	q34.11	Novel	ENSG00000167103	122330677	122339810	471	Kinase
	q34.11	Novel	ENSG00000136908	122343908	122347297	162	Unknown
	q34.11	FLJ00179	Q8TEL4	122349392	122356974	194	Unknown
	q34.11	NM_018033	Q9NW83	122374689	122375144	152	Unknown
AL360268	q34.11	Q8WU12	Q8WU12	122472894	122475975	172	Unknown
AL590708	q34.11	KIAA1896	Q96PZ1	122500273	122518054	568	Mitochondrial solute carrier
	q34.11	PTGES2	Q9H7Z7	122529502	122537271	379	Prostaglandin E synthase 2
	q34.11	Q9N1Y9	Q9N1Y9	122537454	122538008	185	Unknown
	q34.11	LCN2	P80188	122558275	122562260	192	Lipocalin
	q34.11	C9orf16	Q9BUW7	122569160	122572735	83	Unknown
	q34.11	CIZ1	Q9ULV3	122574874	122613197	967	Zinc finger protein
	q34.11	DNM1	Q05193	122612217	122664055	864	Dynamin-1
	q34.11	GOLGA2	Q08379	122665504	122684750	1008	Golgin-95
AL590722	q34.11	Q8N2W6	Q8N2W6	122685026	122697798	209	Unknown
	q34.11	FLJ21673	Q9H6Y8	122709723	122710145	423	Unknown
AL359091	q34.11	FLJ11094	Q95900	122717908	122731245	331	Unknown
	q34.11	COQ4	Q9Y3A0	122731344	122742880	265	Coenzyme Q biosynthesis protein 4
	q34.11	SLC27A4	O95186	122749454	122770025	640	Fatty acid transport protein 4
	q34.11	NM_030914	Q9BTM9	122780169	122799542	101	Unknown
	q34.11	KIAA1502	Q9P226	122820574	122846159	560	Cerebral cell adhesion molecule
	q34.11	ODF2	O14721	122864961	122909768	638	Outer dense fibre of sperm tails 2
AL445287	q34.11	GLE1L	O75458	122913513	122951096	698	Gle-1 like RNA export mediator
AL356481	q34.11	SPTAN1	Q13813	122961411	123042401	2474	Spectrin alpha chain
	q34.11	NM_052844	Q9BV46	123042469	123065595	522	Unknown
	q34.11	SET	Q01105	123092703	123105196	290	SET (HLA-DR associated protein II)
AL359678	q34.11	No genes					
AL441992	q34.11	PKNbeta	O13355	123111331	123129414	889	Protein kinase
	q34.11	ZDHHC12	O32799	123129677	123132930	267	Zinc finger protein
	q34.11	ZYG	O00156	123138594	123180701	766	ZYG homologue
	q34.11	FLJ10743	Q9NVG8	123196140	123219240	275	Unknown

	q34.11	ENDOG	Q14249	123227276	123231484	297	Endonuclease G
	q34.11	HSPC109	Q9P041	123228459	123238629	384	Unknown
	q34.11	CCBL1	Q16773	123241750	123290846	422	Cytoplasmic cysteine
AL672142	q34.11	KIAA1437	Q9P2B1	123294854	12336844	811	Unknown
	q34.11	Q96GM4	Q96GM4	123329703	123351210	206	Unknown
	q34.11	KIAA1094	Q9UPQ8	123354339	123356427	538	Unknown
AL592211	q34.11	KIAA0169	Q14675	123357991	123415903	1739	Unknown
	q34.11	SH3GLB2	Q9BRZ5	123416600	123437108	130	SH3-containing protein
	q34.11	FLJ00199	Q9TEJ6	123445452	123480880	383	Unknown
	q34.11	Q96GF8	Q96GF8	123489937	123499243	237	Unknown
AL158151	q34.11	CRAT	P43155	123503602	123519612	626	Cartinine o-acetyltransferase
	q34.11	PPP2R4	Q15257	123519773	123557754	358	Protein phosphatase 2A
	q34.11	Novel	ENSG00000167133	123585649	123586860	290	Unknown
AL161785	q34.11	FLJ35269	Q8NAJ2	123729824	123733713	232	Unknown
AL353803	q34.11	FLJ34873	Q8NAS2	123745332	123747103	144	Unknown
AL391056	q34.11	Novel	ENSG00000179068	123897948	123913240	98	Unknown
	q34.11	FLJ35803	Q8NA65	124021035	124029584	377	Unknown
AL590369	q34.11	AD003	Q9UI28	124034981	124044744	223	Adrenal gland protein
	q34.11	ASB6	Q9NWX5	124043412	124050973	421	Ankyrin repeat containing protein
	q34.11	PMX2	Q99811	12074444	124131482	253	Paired mesoderm protein
	q34.11	PTGES	O14684	124147139	124161855	152	Prostaglandin E synthase
AL592219	q34.11	No genes					
AL158207	q34.11	TOR1B	O14657	124211961	124220092	336	Torsin B precursor
	q34.11	DYT1	Q96CA0	124221751	124232942	336	Torsin A precursor
	q34.11	HSPC220	Q9NZ63	124236100	124244083	289	Unknown
	q34.11	USP20	Q9Y2K6	124244254	12490636	914	Ubiquitin carboxyl-terminal hydrolase
	q34.11	FNBP1	Q96RU3	124295995	124451976	672	Thyroid receptor interacting protein
AL136141	q34.11	GPR107	Q96T26	124462729	124548972	416	G Protein-coupled receptor
AL392105	q34.11	No genes					
AL360004	q34.11	FREQ	P36610	124581381	124645435	190	Neuronal calcium sensor 1
	q34.11	Novel	ENSG00000178890	124674690	124718869	822	Unknown
50 kb Gap							
AL354898	q34.11	Q8NDA2	Q8NDA2	124808356	124841498	1187	Unknown
	q34.11	FLJ23816	Q8TCI8	124852198	124856039	220	Unknown
	q34.11	ASS	P00966	124866845	124923190	412	Argininosuccinate synthase
AL353695	q34.11	No genes					
AL359092	q34.11	FUBP3	Q92946	125001544	125060268	542	Fuse binding protein 3
	q34.12	PRDM12	Q9H4Q4	125086510	125104913	367	PR domain containing protein 12
	q34.12	RRP4	Q13868	125115687	125126785	293	Exosome complex exonuclease RRP4
AL161733	q34.12	ABL1	P00519	125136236	125309589	1130	Abelson murine leukaemia viral oncogene
	q34.12	FLJ14810	Q96SJ7	125324358	125360767	198	Unknown
AL583807	q34.12	LAMC3	Q9Y6N6	125431028	125516389	1575	Laminin gamma-3 chain precursor
AL355872	q34.12	No genes					
AL157938	q34.12	AIFIL	Q9BQI0	125518441	125545061	150	Ionised calcium binding adaptor molecule 2
	q34.13	NUP214	P35658	125547506	125656586	2140	Nuclear pore complex protein
	q34.13	Q8N2W3	Q8N2W3	125679994	125698463	191	Unknown
AL354855	q34.13	FLJ90726	Q8NBV4	125711653	12731177	271	Unknown
	q34.13	Novel	ENSG00000130710	125729227	125729298	24	Unknown
AL358781	q34.13	BAT2L	Q9BU62	125852061	125869120	325	HLA-B associated transcript
	q34.13	LQFBS-1	O95209	125921328	125922066	245	Unknown
	q34.13	POMT1	Q9UNT2	125924841	125945722	747	Protein-o-mannosyltransferase 1
	q34.13	UCK1_HUMAN	Q9HA47	125945717	125953181	201	Uridine cytidine kinase 1
AL160276	q34.13	GRF2	Q13905	126000707	126159454	1077	Guanine nucleotide releasing factor 2
AL160271	q34.13	CRSP8	O95401	126282028	126512112	273	Cofactor required transcriptional activation
AL603649	q34.13	No genes					

AL713892	q34.13	No genes					
AL691506	q34.13	No genes					
AL513102	q34.13	No genes					
AL353631	q34.13	No genes					
AL159997	q34.13	KIAA1857	Q96JH0	126594193	126675069	541	Netrin G2
	q34.13	KIAA0625	Q8WX33	126693686	126761056	915	Unknown
AL353701	q34.13	TTF1	Q15361	126808230	126835074	882	Transcription termination factor
AL354735	q34.13	Novel	ENSG00000178595	126930940	126975292	179	Unknown
	q34.13	BARHL1	Q9BZE3	127014851	127022519	327	BARH (Drosophila)-like 1
AL160165	q34.13	DDX31	Q96NY2	127026534	127102646	851	DEAD/H Box Helicase
	q34.13	GTF3C4	Q9UKN8	127102586	127122695	822	General transcription factor
AL445645	q34.13	FLJ32704	Q96MA6	127157823	127310564	479	Unknown
	q34.13	C9orf9	Q96E40	127310608	127322275	222	Unknown
	q34.13	TSC1	Q92574	127323595	127376866	1164	Tuberous sclerosis 1 gene
	q34.13	Novel	ENSG00000176140	127379314	127383801	47	Unknown
AL593851	q34.13	GFI1B	O95270	127418923	127426295	330	Growth factor independent 1B
AL162417	q34.2	GTF3C5	Q9H4P2	127462958	12790748	528	General transcription factor
	q34.2	CEL	P19835	127494229	127504006	756	Carboxyl ester lipase
	q34.2	NM_173692		127513557	127514144	196	Unknown
	q34.2	CELL	Q14018	127514780	127519600	59	Carboxyl ester lipase-like
	q34.2	RALGDS	Q12967	127529965	127553410	914	Ral Guanine nucleotide
	q34.2	FRS	Q9UKI5	127585198	127596144	347	Forssman synthetase
AL732364	q34.2	OBPIIB	Q9NPH6	127637537	127641486	170	Odorant binding protein 2B
AL158826	q34.2	ABO	P16442	127687850	127694413	287	ABO blood group system
	q34.2	SURF6	O75683	127754393	127759885	361	SURFEIT locus protein 6
	q34.2	SURF5	Q15528	127764596	127771813	200	SURFEIT locus protein 5
	q34.2	SURF3	P11518	127771906	127775122	265	SURFEIT locus protein 3
	q34.2	Q9H3B2	Q9H3B2	127774377	127775089	101	Unknown
	q34.2	SURF1	Q15526	127775504	127780202	300	SURFEIT locus protein 1
	q34.2	SURF2	Q15527	127780269	127784875	256	SURFEIT locus protein 2
	q34.2	SURF4	O15260	127785181	127799817	269	SURFEIT locus protein 4
	q34.2	Q8NE28	Q8NE28	127800125	127828061	651	Unknown
	q34.2	Novel	ENSG00000175977	127821374	127824619	97	Unknown
	q34.2	XPMC2H	Q9GZR2	127828027	127840010	422	Prevents mitotic catastrophe 2
	q34.2	ADAMTS13	Q96L37	127843961	127881349	1427	Von Willebrand factor-cleaving protease
AL593848	q34.2	C9orf7	Q9UGQ2	127881962	127892726	172	Unknown
	q34.2	SLC2A6	Q8NCC2	127893058	127901068	515	Solute carrier family 2
BX324209	q34.2	No genes					
AC002321	q34.2	No genes					
<5 kb Gap							
AC002101	q34.2	No genes					
AL365494	q34.2	DBH	P09172	128007020	128030001	603	Dopamine beta-monoxygenase precursor
	q34.2	SARDH	Q9UL10	128056341	128124046	832	Sarcosine dehydrogenase
	q34.2	PP3781	Q8WY83	123131956	128132329	124	Unknown
AL590710	q34.2	Novel	ENSG00000176983	128211430	128251481	432	Unknown
	q34.2	SARDH	Q9UL10	128252348	128272381	396	Unknown
AL357934	q34.2	VAV2	P52735	128297977	12826304	878	Oncogene VAV-2 protein
AL445931	q34.2	Novel	ENSG00000179483	128559910	128562122	119	Unknown
	q34.2	BRD3	Q15059	128566862	128602533	726	Bromodomain containing protein3
	q34.2	Novel	ENSG00000179457	128588311	128592826	216	Unknown
AL591386	q34.2	No genes					
200kb Gap							
AL354796	q34.2	No genes					
AL683798	q34.2	No genes					
13 kb Gap							

AL669970	q34.2	RXRA	P19793	129062693	129101647	453	Retinoid X receptor, alpha
AL591890	q34.3	COL5A1	Q96HC0	129302868	129503955	590	Collagen alpha 1 (V) chain precursor
AL603650	q34.3	FCN2	Q15485	129541874	129548582	313	Ficolin 2 precursor
AL353611	q34.3	FCN1	O00602	129570647	129579025	326	Ficolin 1 precursor
AL159992	q34.3	No genes					
AL390778	q34.3	OLFM1	Q9BWJ9	129736484	129782241	467	Olfactomedin related ER localised protein
AL353615	q34.3	NM_173520	Q8N4C0	130006614	130009927	152	Unknown
AL161452	q34.3	Novel	ENSG00000178197	130131516	130144083	96	Unknown
	q34.3	NM_014811	Q9Y4D3	130146060	130152258	1209	Unknown
	q34.3	NM_144654	Q8WU44	130158546	130165104	92	Unknown
	q34.3	MRPS2	Q9Y399	130164060	130168038	296	Mitochondrial ribosomal protein S2
	q34.3	LCN1	P31025	130184820	130189897	176	Lipocalin 1
	q34.3	OBPIIA	Q9NY56	130209504	130213321	170	Odorant-binding protein 2A
AL354761	q34.3	PAEP	P09466	130225123	130230141	157	Progestagen associated endometrial
	q34.3	Novel	ENSG00000176541	130238316	130250477	104	Unknown
AL158822	q34.3	MUPL	Q8WX39	130326687	130329116	172	Putative MUP-like lipocalin
	q34.3	Q8NEE3	Q8NEE3	130356772	130362893	348	Unknown
	q34.3	KCNT1	Q9WX41	130365551	130455523	1151	Unknown
AL353636	q34.3	NM_018627	Q9WX42	130472946	130570503	1298	Unknown
AL355574	q34.3	GPDR1	Q9BSL1	130596334	130624745	405	Glialblastoma related protein
	q34.3	NM_144653	Q96BF6	130674721	130713948	587	Unknown
AL591038	q34.3	Novel	ENSG00000180858	130715097	130738981	273	Unknown
AL138781	q34.3	Q96GU2	Q96GU2	130777953	130782228	29	Unknown
	q34.3	Q8N3G2	Q8N3G2	130869698	130887479	541	Unknown
	q34.3	LHX3	Q9UBR4	130859621	130868480	397	LIM Homeobox gene 3
30 kb Gap							
AL603784	q34.3	AGS3	Q9UFS8	130939617	130943166	530	Unknown
AL592301	q34.3	CARD9	Q9H257	130947895	130957602	536	Caspase recruitment protein
	q34.3	SNAPC4	Q9Y6P7	130959516	130982736	1469	Small nuclear RNA activating complex
	q34.3	SDCCAG3	O60525	130985862	130994412	192	Serologically defined colon cancer antigen
	q34.3	INPP5E	Q10713	130994603	131007700	525	Mitochondrial processing peptidase subunit
	q34.3	PPI5PIV	Q9NRR6	131012558	131023761	644	Phosphatidylinositol (4,5) bisphosphate 5-phosphatase
	q34.3	KIAA0310	Q96HP1	131024036	131059908	1433	Unknown
	q34.3	NM_152571	Q8N9P6	131067482	131070005	203	Unknown
	q34.3	NOTCH1	P46531	131078383	131129726	2559	Neurogenic locus NOTCH homologue protein
AL590226	q34.3	Novel	ENSG00000180360	131211094	131230721	251	Unknown
	q34.3	Q9P058	Q9P058	131232664	131244366	146	Unknown
	q34.3	ZNEU1	Q9UHF1	131242795	131256617	273	ZNEU1/NEU1 protein
	q34.3	AGPAT2	O15120	131257082	131271362	278	Acylglycerol-phosphate-acyltransferase 2
	q34.3	NM_152421	Q8WYU5	131296511	131307989	431	Unknown
AL355987	q34.3	NM_032887	Q96IC0	131309173	131312123	37	Unknown
	q34.3	Novel	ENSG00000169672	131313093	131332422	726	Unknown
	q34.3	FLJ33328	Q8NBE9	131338327	131341477	333	Unknown, has IG_MHC domain
	q34.3	FLJ10101	Q96BU21	131383198	131425126	307	Unknown
	q34.3	FLJ30985	Q96NE7	131387866	131392787	197	Unknown
	q34.3	Nov-01	ENSG00000054148	131433033	131434977	186	Unknown
	q34.3	Novel	ENSG00000148406	131436356	131438789	350	Unknown
	q34.3	Novel	ENSG00000179285	131439193	131440765	264	Unknown
	q34.3	Q8NCX7	Q8NCX7	131440944	131444739	236	Unknown
	q34.3	EDF1	O60869	131446058	131450225	148	Endothelial differentiation-related factor 1
AL449425	q34.3	TRAF2	TRA2_HUMAN	131482651	131510546	501	TNF receptor associated factor 2
AL807752	q34.3	NM_018998	Q969U6	131524374	131528545	566	Unknown
	q34.3	C8G	P07360	131529200	131530906	198	Complement component 8, gamma subunit
	q34.3	PTGDS	P41222	131561509	131565680	190	Prostaglandin D2 synthase
	q34.3	Novel	ENSG00000176785	131567941	131570349	137	Unknown

	q34.3	CLIC3	O95833	131578574	131580807	207	Chloride intracellular channel protein 3
	q34.3	ABCA2	Q9BZC7	131591173	131612250	2440	ATP-binding cassette, subfamily A, member 2
	q34.3	Q9BUH6	Q9BUH6	131576357	131577915	212	Unknown
	q34.3	FUT7	Q11130	131614669	131615685	339	Fucosyltransferase 7
AL929554	q34.3	Q8N224	Q8N224	131618602	131619006	135	Unknown
	q34.3	NPDC1	Q9NQX5	131623413	131630157	325	Neuronal proliferation protein 1
	q34.3	ENTPD2	Q9Y5L3	131632616	131638290	494	Ectonucleoside triphosphate diphosphohydrolase 2
	q34.3	Q8TEI1	Q8TEI1	131662043	131670905	270	Unknown
	q34.3	Q8WUC7	Q8WUC7	131669250	131671114	104	Unknown
	q34.3	MAN1B1	Q9UKM7	131671245	131695076	699	Endoplasmic reticulum mannosidase
	q34.3	Novel	ENSG00000179395	131687948	131691411	989	Unknown
	q34.3	DPP7	Q9UHL4	131696546	131699393	331	Dipeptidyl-peptidase
	q34.3	GRIN1	Q05586	131724505	131753424	928	Glutamate receptor subunit zeta 1
	q34.3	NM_013366	Q9UJX6	131759296	131773049	822	Anaphase-promoting complex subunit 2
	q34.3	SSNA1	O43805	131773159	131774882	119	Sjorgen's syndrome nuclear autoantigen 1
	q34.3	FLJ90254	Q8NCH2	131776627	131784420	433	Unknown
	q34.3	NM_053045	Q969S6	131788473	131790029	136	Unknown
BX255925	q34.3	Unfinished					
BX322799	q34.3	Unfinished					
AL365502	q34.3	AD038	Q96F01	132035782	132039264	205	AD038 protein, function unknown
	q34.3	NM_152285	Q8N5I2	132039236	132048941	433	Unknown
	q34.3	MZIP	Q96E35	132064147	132072376	227	Melanin-concentrating hormone receptor 1
	q34.3	NM_138778	Q9BTV6	132075663	132096389	484	Unknown
	q34.3	MRPL41	NM_032477	132098739	132099406	137	Mitochondrial ribosomal protein L41
	q34.3	NTE-L	Q8TAY5	132153193	132190541	702	Neuropathy Target Esterase
	q34.3	FLJ14568		132192950	132200987	327	Unknown
	q34.3	Q9NTU2		13295160	132200984	130	Unknown
AL590627	q34.3	Novel	ENSG00000181090	132289873	132374235	436	Unknown
AL611925	q34.3	HMT1	Q9H9B1	132395728	132553855	1247	Histone methyltransferase
AL772363	q34.3	CACNA1B	Q00975	132562084	132806329	2357	Calcium channel voltage-dependent
AL591424	q34.3	IL9R	ENSG00000165830	132821281	132832099	216	Interleukin 9 receptor IL 9R
	q34.3	Novel	ENSG00000159247	132859209	132861370	425	Tubulin pseudogene
	q34.3	Novel	ENSG00000179338	132868297	132868767	157	LINE 1 Reverse Transcriptase Homologue
AL954642	q34.3	No genes					