

Supplementary Table 2. Comprehensive list of variants found in 46 efflux pump genes

Genes	POS	REF	ALT	Effects	Protein Change	Datasets	Occurrence (n)	SIFT/Polyphen score
Rv0037c	40002	C	A	missense	401A>401S	XDR	12	Low
Rv0191	222556	G	C	missense	90V>90L	XDR	24	Medium
Rv0191	222824	T	C	missense	179V>179A	XDR	46	Medium
Rv0191	222870	G	A	missense	203A>203V	MDR	3	Low
Rv0191	222896	C	T	missense	213A>213T	MDR	4	Low
Rv0191	222925	G	A	missense	213A>213T	PreXDR/MDR	111/191	High
Rv0191	223080	T	C	missense	339A>339V	MDR	5	Low
Rv0191	223304	C	T	missense	339A>339V	XDR	11	Medium
Rv0191	223319	G	A	missense	344G>344D	PreXDR/XDR	11/22	Medium
Rv0191	223517	C	T	missense	410P>410L	XDR	33	Medium
	227098	T	C		74M>74T			
Rv0194				missense		PreXDR	121	High
Rv0194	227217	G	A	missense	114G>114S	XDR	43	Medium
Rv0194	227252	A	G	missense	270#	MDR	12	Low
Rv0194	227344	T	C	missense	156V>156A	PreXDR	21	Medium
			ATTACGGTGGGC					
Rv0194	227685	A	ACCTTTGTTGCC	frameshift	277A>277V	MDR	15	High
Rv0194	227707	C	T	missense	398V>398M	MDR	6	Low
		TGGAGTTC			334LEFQ>334			
Rv0194	227878	CA	T	frameshift	L	PreXDR	77	High
Rv0194	228069	G	A	missense	431G>431R	MDR	8	Low
Rv0194	228168	G	C	missense	486L>486M	MDR	9	Low
Rv0194	228459	C	T	missense	528R>528C	PreXDR/XDR	12/32	Medium
Rv0194	228503	C	G	missense	542D>542E	PreXDR	12	Medium
Rv0194	228506	C	CG	stop_gained	682Q>682*	MDR	11	High
Rv0194	228960	C	T	stop_gained	695Q>695*	PreXDR	1	High
Rv0194	229172	C	T	missense	853P>853L	MDR	13	Medium

Rv0194	229401	GT	G	frameshift	842#	XDR	15	High
Rv0194	230170	C	A/T	missense	1098P>1098L	MDR/XDR	12/16	High
Rv0194	229621	C	CTGCT	frameshift	915#	PreXDR	1	High
Rv0194	229657	C	T	missense	927P>927L	XDR	4	Low
Rv0194	230176	T	G	missense	1100I>1100S	XDR	11	Low
Rv0206c	245850	G	C	missense	490A>490G	PreXDR	11	Low
Rv0206c	246004	C	T	missense	439E>439K	PreXDR	4	Low
Rv0206c	246183	T	G	missense	379E>379A	PreXDR	1	Low
Rv0450c	539120	C	A	missense	791R>791L	PreXDR	66	High
Rv0450c	539500	C	G	missense	664M>664I	PreXDR	61	High
Rv0450c	539790	C	A	missense	568D>568Y	PreXDR	30	Medium
Rv0450c	540077	C	T	missense	472G>472D	PreXDR	1	Low
Rv0450c	540078	C	G	missense	472G>472R	XDR	1	Low
Rv0450c	540097	T	A	missense	465K>465N	PreXDR	1	Low
Rv0450c	540587	G	A	missense	302T>302I	PreXDR	1	Low
Rv0507	597368	C	G	missense	57P>57R	PreXDR	1	Low
Rv0507	598207	G	A	missense	337V>337I	PreXDR	1	Low
Rv0507	598283	G	A	missense	362R>362Q	XDR	1	Low
Rv0507	598475	G	A	missense	426R>426H	PreXDR/XDR	76/111	High
Rv0507	598501	G	C	missense	435E>435Q	XDR	12	Medium
Rv0507	598588	A	G	missense	464S>464G	PreXDR/XDR	1/12	Medium
Rv0507	599398	G	GC	frameshift	734#	XDR	1	Medium
Rv0507	599455	A	C	missense	753T>753P	XDR	1	Low
Rv0507	599787	G	C	missense	863M>863I	PreXDR	1	Low
Rv0507	599801	G	A	missense	868G>868E	XDR	1	Low
	775639	T	C		948I>948V			
Rv0676c				missense		PreXdr/XDR	29/321	High
Rv0676c	776100	G	A	missense	794T>794I	PreXdr/XDR	24/121	High
Rv0676c	775645	G	A	stop_gained	946R>946*	XDR	3	Medium
Rv0676c	775974	A	G	missense	836L>836S	PreXDR	4	Low
Rv0676c	776356	G	T	missense	709L>709I	PreXDR	5	Low
Rv0676c	777310	C	T	missense	391G>391S	PreXDR	6	Low
Rv0676c	777451	C	G	yes	344V>344L	XDR	12	High
Rv0676c	778363	AC	A	frameshift	39#	XDR	1	Medium

Rv0678	779048	T	C	missense	20V>20A	PreXDR	1	Low
Rv0678	779181	CG	C	frameshift	64#	XDR	1	Medium
Rv0678	779392	C	T	missense	135R>135W	XDR	8	Low
Rv0783c	877472	G	C	stop_gained	323Y>323*	PreXDR	1	Medium
Rv0783c	877570	T	C	missense	291M>291V	XDR	1	Low
Rv0783c	877701	C	G	missense	247G>247A	XDR	1	Low
Rv0783c	878049	A	G	missense	131I>131T	PreXDR	1	Low
Rv0783c	878062	C	T	missense	127V>127I	PreXDR	3	Low
Rv0783c	878070	A	G	missense	124L>124P	PreXDR	1	Low
Rv0783c	878287	A	C	missense	52S>52A	XDR	1	Low
Rv0783c	878386	G	C	missense	19P>19A	XDR	1	Low
Rv0842	938170	A	G	missense	20D>20G	PreXDR	1	Low
Rv0842	938494	G	T	missense	128R>128L	XDR	3	Low
Rv0842	939153	C	T	missense	348R>348W	XDR	1	Low
Rv0842	939382	C	T	missense	424P>424L	PreXDR	1	Low
Rv0849	946179	C	T	missense	42P>42S	PreXDR	1	Low
Rv0849	946286	C	A	stop_gained	77Y>77*	PreXDR	1	Medium
Rv0849	946641	GA	G	frameshift	196#	XDR	5	Medium
Rv0849	946759	C	T	missense	235P>235L	XDR	1	Low
Rv0849	946881	TG	T	frameshift	276#	PreXDR	1	Medium
Rv1217c	1360300	A	C	missense	501L>501R	PreXDR	1	Low
Rv1217c	1360685	C	A	missense	373A>373S	PreXDR	1	Low
Rv1217c	1361149	G	A	missense	218T>218I	PreXDR	1	Low
Rv1217c	1361788	ACCGT	A	frameshift	4#	PreXDR	1	Medium
Rv1217c	1361285	C	T	missense	173A>173T	PreXDR/XDR	89/234	High
Rv1217c	1361350	A	C	missense	151L>151R	XDR	301	High
Rv1218c	1361811	A	G	missense	308V>308A	PreXDR	1	Low
Rv1218c	1361988	T	C	missense	249D>249G	XDR	1	Low
		T	C			MDR/PreXDR/		
Rv1218	1362006			missense	243Q>243R	XDR	1/112/12	High
Rv1218c	1362297	A	C	missense	146L>146R	PreXDR	1	Low
Rv1218c	1362417	A	G	missense	106L>106P	PreXDR	1	Low
Rv1218c	1362460	T	G	missense	92T>92P	XDR	1	Low

Rv1218c	1362522	C	T	missense	71G>71D	XDR	2	Low
Rv1218c	1362664	C	T	missense	24A>24T	XDR	2	Low
Rv1250	1394315	T	C	missense	46M>46T	PreXDR	1	Low
Rv1250	1394764	G	A	missense	196A>196T	XDR	2	Low
Rv1250	1395010	A	G	missense	278R>278G	XDR	312	High
Rv1250	1395131	T	C	missense	318V>318A	XDR	2	Low
Rv1250	1395175	T	G	missense	333S>333A	XDR	1	Low
Rv1250	1395287	T	C	missense	370F>370S	XDR	1	Low
Rv1250	1395454	C	A	missense	426R>426S	XDR	1	Low
Rv1257c	1406042	C	T	missense	15E>15K	XDR	8	Low
Rv1258c	1406145	G	A	missense	399A>399V	PreXDR	1	Low
Rv1258c	1406170	C	T	missense	391G>391R	XDR	2	Low
Rv1258c	1406236	G	T	missense	369P>369T	XDR	1	Low
Rv1258c	1406451	G	A	missense	297T>297I	PreXDR	3	Low
Rv1258c	1406600	G	GA	frameshift	247#	PreXDR	1	Medium
Rv1258c	1407255	G	T	missense	29A>29E	XDR	1	Low
Rv1258c	1407286	C	T	missense	19A>19T	PreXDR	1	Low
Rv1272c	1420734	C	A	missense	524Q>524H	PreXDR	1	Low
Rv1272c	1420963	T	G	missense	448E>448A	PreXDR	1	Low
Rv1273c	1422473	A	C	missense	526I>526M	PreXDR	1	Low
Rv1273c	1423527	A	G	missense	175I>175T	XDR	2	Low
Rv1273c	1422667	C	T	missense	462G>462K	PreXDR/XDR	71/121	High
Rv1410c	1586305	C	T	missense	488V>488M	PreXDR	1	Low
Rv1410c	1586929	C	T	missense	280A>280T	XDR	1	Low
Rv1456c	1642007	A	G	missense	140M>140T	XDR	1	Low
Rv1457c	1642754	A	G	missense	190M>190T	XDR	1	Low
					133T>133A			
Rv1458c	1643864	T	C	missense		PreXDR/XDR	32/130	High
Rv1458c	1643897	G	T	missense	122L>122M	XDR	4	Low
Rv1634	1839195	A	G	missense	10S>10G	PreXDR	1	Low
Rv1634	1839306	A	G	missense	47I>47V	XDR	123	High
Rv1634	1839577	C	T	missense	137P>137L	PreXDR	34	Medium
Rv1634	1839759	G	C	missense	198G>198R	PreXDR/XDR	11/23	High
Rv1634	1839795	A	G	missense	210T>210A	PreXDR	11	Low
Rv1686c	1912050	G	C	missense	11T>11R	PreXDR	1	Low

Rv1687c	1912476	C	G	missense	149A>149P	PreXDR	1	Low
Rv1687c	1912736	C	G	missense	62C>62S	XDR	4	Low
Rv1687c	1912829	A	G	missense	31L>31P	XDR	1	Low
Rv1704c	1929935	C	A	missense	508A>508S	PreXDR	1	Low
Rv1704c	1929979	G	A	missense	493A>493V	PreXDR	111	High
Rv1704c	1930568	C	G	missense	297V>297L	PreXDR	1	Low
Rv1704c	1930589	G	C	missense	290L>290V	PreXDR	11	Medium
Rv1704c	1930895	G	C	missense	188P>188A	XDR	15	Medium
Rv1704c	1931041	A	C	missense	139V>139G	XDR	2	Low
Rv1704c	1931179	C	A	missense	93R>93L	XDR	123	High
Rv1819c	2063078	G	GC	frameshift	551#	MDR/PreXDR/ XDR	32/21/11	High
Rv1819c	2063911	A	G	missense	273I>273T	PreXDR/XDR	18/291	High
Rv1819c	2062922	T	C	missense	603I>603V	XDR	112	High
Rv1877	2126079	G	A	missense	59G>59D	PreXDR/XDR	21/11	Medium
Rv1877	2126566	C	G	missense	221I>221M	XDR	1	Low
Rv1877	2126739	G	A	missense	279S>279N	PreXDR	1	Low
Rv1877	2127011	T	G	missense	370W>370G	PreXDR/XDR	49/154	High
Rv1877	2127102	A	G	missense	400N>400S	PreXDR	1	Low
Rv1877	2127504		C	missense	534I>534T	XDR	12	High
Rv1877	2127676	T	G	stop_gained	591Y>591*	PreXDR/XDR	111/211	High
Rv2209	2473913	G	A	missense	172A>172T	XDR	1	Low
Rv2209	2474406	C	G	missense	336A>336G	XDR	1	Low
Rv2209	2474480	T	A	missense	361C>361S	PreXDR	1	Low
Rv2209	2474585	A	T	missense	396T>396S	XDR	1	Low
Rv2209	2474756	G	A	missense	453G>453R	XDR	1	Low
Rv2333c	2606811	G	A	missense	504T>504I	XDR	1	Low
Rv2333c	2607198	A	G	missense	375V>375A	PreXDR	2	Low
Rv2333c	2607611	G	T	stop_gained	237C>237*	PreXDR	1	Medium
		TCGTCGTA CCGATGCT CGCGATG						
Rv2333c	2607883	G	T	frameshift	139#	XDR	1	Medium

Rv2333c	2607975	G	A	missense	116S>116L	PreXDR	1	Low
Rv2333c	2608091	T	TA	frameshift	77I#	PreXDR/XDR	32/27	High
Rv2459	2761106	A	G	missense	85S>85G	PreXDR	1	Low
Rv2459	2762105	G	A	missense	418A>418T	XDR	1	Low
Rv2459	2762252	G	A	missense	467E>467K	PreXDR	1	Low
Rv2459	2762302	G	GT	frameshift	483#	XDR	5	Medium
Rv2477c	2783026	G	C	missense	339D>339E	XDR	1	Low
Rv2477c	2783106	C	A	missense	313V>313F	XDR	2	Low
Rv2477c	2783487	G	A	missense	186P>186S	PreXDR	1	Low
Rv2686c	3003509	G	A	missense	177A>177V	PreXDR	1	Low
Rv2686c	3003863	T	TA	frameshift	59#	XDR	5	Medium
Rv2686c	3003909	C	A	missense	44V>44F	XDR	1	Low
Rv2688c	3005014	A	G	missense	213C>213R	PreXDR/XDR	77/11	High
Rv2688c	3005185	G	T	missense	156P>156T	PreXDR/XDR	12/198	High
Rv2688c	3005554	G	GCT	frameshift	33#	XDR	1	Medium
Rv2846c	3153809	G	T	missense	275L>275M	XDR	1	Low
Rv2937	3273449	G	C	missense	82V>82L	PreXDR	1	Low
Rv2937	3273710	A	C	missense	169I>169L	XDR	1	Low
Rv2942	3285623	G	A	missense	185R>185H	PreXDR/XDR	44/11	Medium
Rv2942	3285860	A	C	missense	264H>264P	PreXDR	1	Low
Rv2942	3286117	C	T	missense	350L>350F	XDR	5	Low
Rv2942	3286531	G	A	missense	488A>488T	XDR	1	Low
Rv2942	3287323	C	G	missense	752Q>752E	XDR	1	Low
Rv2994	3351806	G	A	missense	180A>180T	PreXDR	1	Low
Rv2994	3352064	G	A	missense	266A>266T	XDR	4	Low
Rv2994	3352508	C	T	missense	414R>414C	XDR	1	Low
Rv3000	3359089	T	C	missense	160S>160P	PreXDR	1	Low
Rv3000	3359236	C	CTCGTT	frameshift	209#	PreXDR	1	Medium
Rv3008	3366741	G	A	stop_gained	33W>33*	PreXDR	111	Medium
Rv3008	3367041	T	TGAA	frameshift	133L>133LN	MDR	23	High
CGCCCCGGCATG								
TCCGGAGACTCC								
Rv3008	3367043	C	AGTTCT	frameshift	134#	MDR	11	Medium

Rv3065	3430657	G	A	missense	91V>91I	XDR	4	Low
Rv3197		TGCGCGG		inframe_dele				
A	3568418	ACGTCC	T	tion	84GRPRK>84K	PreXDR	1	Medium
Rv3197								
A	3568600	A	G	missense	27L>27P	XDR	4	Low
Rv3197								
A	3568646	T	TG	frameshift	12#	XDR	1	Medium
Rv3239c	3614848	A	C	missense	919L>919R	XDR	1	Low
Rv3239c	3614914	T	C	missense	897D>897G	PreXDR	1	Low
Rv3239c	3615127	GC	G	frameshift	826#	PreXDR	1	Medium
Rv3239c	3615166	C	A	missense	813G>813V	PreXDR	1	Low
Rv3239c	3615598	G	A	missense	669S>669L	PreXDR	1	Low
Rv3239c	3615724	G	T	missense	627T>627K	XDR	1	Low
Rv3239c	3615889	A	G	missense	572L>572P	PreXDR	1	Low
Rv3239c	3616077	CGGAT	C	frameshift	508#	PreXDR	1	Medium
			ACACCGAGCACC	inframe_inse	426V>426AVL			
Rv3239c	3616327	A	G	rtion	GV	XDR	2	Medium
Rv3239c	3617112	C	CT	frameshift	164#	XDR	1	Medium
Rv3239c	3617113	A	C	missense	164L>164R	XDR	1	Low
Rv3239c	3617389	A	G	missense	72V>72A	PreXDR	4	Low
Rv3239c	3617600	G	C	missense	2H>2D	XDR	1	Low
Rv3728	4174946	G	C	missense	25R>25P	XDR	1	Low
Rv3728	4175107	T	C	missense	79S>79P	PreXDR	1	Low
Rv3728	4175113	A	G	missense	81M>81V	PreXDR	1	Low
Rv3728	4175847	G	A	stop_gained	325W>325*	XDR	154	High
Rv3728	4175847	G	A	stop_gained	325W>325*	PreXDR	49	High
Rv3728	4176184	G	A	missense	438A>438T	PreXDR	1	Low
Rv3728	4176260	A	G	missense	463H>463R	XDR	4	Low
				inframe_dele				
Rv3728	4176295	GTGGGGA	G	tion	475VGI>475V	XDR	1	Medium
Rv3728	4176544	G	A	missense	558A>558T	PreXDR	1	Low
Rv3728	4176562	G	A	missense	564A>564T	XDR	1	Low
Rv3728	4177544	G	A	missense	891R>891H	XDR	1	Low

Rv3728	4177551	C	G	missense	893I>893M	PreXDR	1	Low
Rv3728	4177621	C	G	missense	917R>917G	PreXDR	1	Low
Rv3728	4177774	G	A	missense	968D>968N	XDR	1	Low
Rv3728	4177930	G	T	missense	1020A>1020S	XDR	1	Low
Rv3728	4178026	G	A	missense	1052A>1052T	XDR	1	Low
Rv3755c	4201882	C	T	missense	3A>3T	PreXDR	1	Low
				inframe_deletion				
Rv3756c	4202052	CGAT	C	frameshift	187IA>187A	PreXDR	123	High
Rv3756c	4202100	GCC	G	missense	171#	PreXDR	1	Medium
Rv3756c	4202501	A	G	missense	38V>38A	XDR	1	Low
Rv3756c	4202510	G	T	missense	35A>35E	PreXDR/XDR	11/1	Medium
Rv3756c	4202513	G	C	missense	34T>34S	PreXDR	1	Low
Rv3756c	4202538	G	A	missense	26R>26C	XDR	1	Low
					1082W>1082			
Rv3823c	4288284	C	T	stop gained	*	XDR	145	High
Rv3823c	4288435	T	G	missense	1032N>1032T	PreXDR	1	Low
Rv3823c	4288490	A	G	missense	1014F>1014L	XDR	1	Low
Rv3823c	4288690	A	T	missense	947M>947K	PreXDR	1	Low
Rv3823c	4288730	T	C	missense	934T>934A	XDR	1	Low
Rv3823c	4289803	T	C	missense	576N>576S	XDR	1	Low
Rv3823c	4290524	A	C	missense	336F>336V	XDR	1	Low
Rv3823c	4291047	CG	C	frameshift	161#	XDR	4	Medium
Rv3823c	4291078	G	C	missense	151T>151S	PreXDR	1	Low

*' stop codon, '#' change of greater than 10 amino acids