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Table 1: Concordance by total mutant allele frequency (MAF) ratios

Sample No.	Gene	Mutation	Amino acid changes	Rx-MAF (%)	Bx-MAF (%)	Rx-MAF ratios	Bx-MAF ratios	Agreement
Rx&Bx1	APC	c.3997delA	Frameshift	8.96	3.94	1	1	
	APC	c.4216C>T	Q>*	11.94	4.07	1.332589286	1.032994924	C
	NRAS	c.35G>A	G>D	20.56	8.12	2.294642857	2.060913706	C
	TP53	c.273G>A	W>*	28.68	4.79	3.200892857	1.215736041	C
Rx&Bx2	APC	c.4216C>T	Q>*	21.99	12.96	1	1	
	KRAS	c.34G>T	G>C	33.5	22.45	1.523419736	1.732253086	C
Rx&Bx3	APC	c.4382_4383delAA		30.1	29.65	1	1	
	KRAS	c.35G>A	G>D	61.15	61.25	2.031561462	2.065767285	C
	TP53	c.428T>A	V>E	50.79	49.97	1.687375415	1.685328836	C
	FBXW7	c.1394G>A	R>H	32.07	30.91	1.065448505	1.042495784	C
	SMAD4	c.1609G>T	D>Y	52.87	54.63	1.756478405	1.842495784	C
Rx&Bx4	APC	c.4375_4376insC	Frameshift	12.91	12.09	1	1	
	KRAS	c.35G>T	G>V	35.48	33.59	2.748257165	2.778329198	C
	TP53	402_403delTT	Frameshift	45.2	45.68	3.50116189	3.778329198	C
Rx&Bx5	TP53	c.994-2A>C	Splice variant	31.11	35.74	1	1	
Rx&Bx6	APC	c.4326delT	Frameshift	13.39	6.02	1	1	
	KRAS	c.35G>T	G>V	24.49	11.85	1.828976848	1.968438538	C
	PIK3CA	c.1633G>A	E>k	12.54	4.79	0.936519791	0.795681063	C
Rx&Bx7	APC	c.4732delT	Frameshift	11.66	9.56	1	1	
	KRAS	c.436G>A	A>T	11.83	9.45	1.01457976	0.988493724	C

Rx&Bx8	-	-		-	-			
Rx&Bx9	APC	c.4660_4661insA	Frameshift	25.1	14.91	1	1	
	KRAS	c.35G>T	G>V	29.5	15.94	1.175298805	1.069081154	C
	TP53	c.524G>A	R>H	13.53	20.14	0.539043825	1.350771294	D
	TP53	c.886C>T	R>*	3.9	3.8	0.155378486	0.254862508	C
	PIK3CA	c.331_333delAAG	Frameshift	10.23	17.37	0.407569721	1.16498994	D
	GNAS	c.2543C>T	R>H	3.38		0.134661355	0	D
Rx&Bx10	APC	c.3925G>T	E>*	5.53	15.2	1	1	
	APC	c.3940_3941delAG	Frameshift	6.66	16.69	1.204339964	1.098026316	C
	APC	c.3946C>T	A>V	6.83	16.96	1.235081374	1.115789474	C
	KRAS	c.38G>A	G>D	6.95	16.72	1.256781193	1.1	C
	TP53	c.623A>G	D>A	5.8	18.01	1.048824593	1.184868421	C
Rx&Bx11	APC	c.4216C>T	Q>*	19.94	27.48	1	1	
	KRAS	c.34G>T	G>C	18.73	24.58	0.939317954	0.894468705	C
	PIK3CA	c.290C>A	P>H	6.64	8.27	0.332998997	0.300946143	C
Rx&Bx12	KRAS	c.35G>A	G>D	21.99	40.36	1	1	
	TP53	c.523C>T	R>C	12.85	30.78	0.584356526	0.762636274	C
	FBXW7	c.1177C>T	R>*	12.49	27.86	0.567985448	0.690287413	C
		c.1513C>T	R>C	13.89	27.81	0.63165075	0.689048563	C
Rx&Bx13	KRAS	c.35G>T	G>V	10.15	4.82	1	1	
	TP53	c.186_193delAGCTC	Frameshift	7.38	4.6	0.727093596	0.954356846	C
	PIK3CA	c.247_249invTTT	Frameshift	6.59	3.77	0.649261084	0.782157676	C
	GNAS	c.2531G>A	S>F	3.05		0.300492611	0	D
Rx&Bx14	APC	c.4385_4386delAG	Frameshift	6.68	12.83	1	1	
	PIK3CA	c.1637A>T	Q>L	5.46	11.28	0.817365269	0.8791894	C
	FBXW7	c.1136A>T	H>L	6.05	11.74	0.905688623	0.915042868	C

	PTEN	c.801+1G>A	Splice variant	10.1	20.73	1.511976048	1.615744349	C
	SMAD4	c.1082G>A	R>H	5.47	3.4	0.818862275	0.265003897	C
Rx&Bx15	-	-		-	-			
Rx&Bx16	BRAF	c.1780G>A	D>N	30.69	35.29	1	1	
	TP53	c.817C>T	R>C	50.18	60.3	1.63506028	1.708699348	C
Rx&Bx17	APC	c.4011_4012del	LQ>L*	24.32	29.75	1	1	
	KRAS	c.38G>A	G>D	13.38	16.33	0.550164474	0.548907563	C
	TP53	c.817C>T	R>C	34.63	41.96	1.423930921	1.410420168	C
	TP53	c.874A>G	K>E	13.03	15.4	0.535773026	0.517647059	C
	PIK3CA	c.1633G>A	E>K	3.44	3.93	0.141447368	0.13210084	C
	FBXW7	c.2065C>T	R>W	44.09	38.08	1.812911184	1.28	C
Rx&Bx18	APC	c.4529delG	Frameshift	45.82	14.88	1	1	
	APC	c.4530C>A	S>R	46.92	15.35	1.024006984	1.031586022	C
	KRAS	c.436G>A	A>T	51.03	28.2	1.113705805	1.89516129	C
	PIK3CA	c.316G>C	G>R	16.81	22.09	0.366870362	1.484543011	D
	FBXW7	c.1513C>T	R>C	48.5	17.97	1.058489742	1.20766129	C
Rx&Bx19	BRAF	c.1799T>A	V>E	19.69	27.53	1	1	
	TP53	c.404G>T	C>F	28.81	48.91	1.463179279	1.776607337	C
Rx&Bx20	TP53	c.23C>T	P>L	3.22		1		
	TP53	c.524G>A	R>H	18.71	22.23	5.810559006	--	D
Rx&Bx21	APC	c.4263_4264insA	Frameshift	16.68	16.34	1	1	
	APC	c.4264_4271del	Frameshift	16.57	16.18	0.993405276	0.990208078	C
	KRAS	c.35G>T	G>V	16.97	18.25	1.017386091	1.116891065	C
	TP53	c.874A>G	K>E	51.66	52.22	3.097122302	3.195838433	C
	PIK3CA	c.1633G>A	E>K	17.7	16.36	1.061151079	1.00122399	C

	SMAD4	c.1091T>G	L>W	10.93	12.35	0.655275779	0.755813953	C
		c.1094G>A	G>D	9.95	6.98	0.596522782	0.427172583	C
Rx&Bx22	TP53	c.524G>A	R>H	21.52	30.03			
Rx&Bx 23	APC	c.2663C>T	A>V	13.63	24.05	1	1	
	APC	c.4222G>T	E>*	27.69	48.93	2.031548056	2.034511435	C
	KRAS	c.35G>A	G>D	25.38	41.69	1.862068966	1.733471933	C
	TP53	c.229C>T	P>S	51.04	47.78	3.744680851	1.986694387	C
	PIK3CA	c.325_327delGAA	Frameshift	13.75	26.56	1.008804109	1.104365904	C
	FBXW7	c.1393C>T	R>C	10.51	18.8	0.771093177	0.781704782	C
Rx&Bx24	TP53	c.844C>T	R>W	15.29	4.85	1	1	
	PTEN	c.795delA	Frameshift	3.15	1.85	0.206017005	0.381443299	C
Rx&Bx25	TP53	c.659A>G	Y>C	22.2	36.21			

*C= concordant, D=discordant

Table 2: Allelic imbalance (AI) status of Rx and Bx

Sample pair No.	Informative SNP Loci	Rx	Bx	AI status pair	Agreement per SNP locus
1	rs2228230	45.29	48.16	NAI/NAI	C
	rs1050171	50.64	50.39	NAI/NAI	C
2	rs3733542	49.67	47.62	NAI/NAI	C
	rs41115	48.31	50.48	NAI/NAI	C
	rs1050171	71.56	61.82	LWA/LWA	C
3	rs41115	48.24	50.73	NAI/NAI	C
	rs1050171	50.62	48.36	NAI/NAI	C
	rs2023748	46.73	45.25	NAI/NAI	C
	rs41737	52.49	52.3	NAI/NAI	C
	rs1137282	26.2	24.76	LPA/LPA	C
4	rs1050171	56.24	49.35	NAI/NAI	C
	rs2023748	40.86	38.53	LPA/LPA	C
	rs41737	44.63	40.59	NAI/LPA	D
5	rs2228230	34.51	43.18	LPA/LPA	C
	rs1042522	25.62	44.24	LPA/NAI	D
6	rs41115	37.2	31.16	LPA/LPA	C
7	rs2228230	42.42	43.24	LPA/LPA	C
	rs41115	62.91	62	LWA/LWA	C
	rs2229066, rs17290559	48.83	48.74	NAI/NAI	C
	rs2023748	44.9	47.1	NAI/NAI	C

	rs41737	50.31	48.49	NAI/NAI	C
	rs1137282	40.46	39.08	LPA/LPA	C
	rs1042522	63.53	64.22	LWA/LWA	C
8	rs41115	64.73	63.53	LWA/LWA	C
	rs1137282	47.31	48.64	NAI/NAI	C
	rs1042522	53.95	58.39	NAI/LWA	D
9	rs2228230	34.4	33.38	LPA/LPA	C
10	rs3733542	50.4	49.45	NAI/NAI	C
	rs41115	50.37	47.18	NAI/NAI	C
11	rs2023748	56.85	55.89	LWA/NAI	D
	rs41737	58.6	59.13	LWA/LWA	C
	rs1042522	75.14	75.12	LWA/LWA	C
12	rs1050171	63.04	65.31	LWA/LWA	C
	rs41737	42.69	38.51	LPA/LPA	C
	rs1042522	40.24	33.67	LPA/LPA	C
13	rs41737	57.12	49.75	LWA/NAI	D
14	rs2228230	47.47	46.37	NAI/NAI	C
	rs41115	47.75	47.38	NAI/NAI	C
	rs1050171	53.44	42.62	NAI/LPA	D
	rs41737	46.97	48.12	NAI/NAI	C
15	rs3733542	48.36	48.86	NAI/NAI	C
	rs41115	54.99	52.48	NAI/NAI	C

	rs2229066, rs17290559	41.66	41.61	LPA/LPA	C
	rs2023748	49.58	49.1	NAI/NAI	C
16	rs2228230	48.77	47.72	NAI/NAI	C
	rs41115	48.42	48.31	NAI/NAI	C
17	rs2228230	48.03	49.54	NAI/NAI	C
	rs3733542	50.1	48.41	NAI/NAI	C
	rs41115	53.2	57.51	NAI/LWA	D
	rs1050171	48.24	54.96	NAI/NAI	C
18	rs2228230	48.78	49.11	NAI/NAI	C
	rs3733542	48.9	50.2	NAI/NAI	C
	rs41115	38.28	35.64	LPA/LPA	C
	rs1050171	52.07	48.21	NAI/NAI	C
	rs1137282	53.27	53.53	NAI/NAI	C
	rs1042522	51.12	53.7	NAI/NAI	C
19	rs41115	49.12	51.38	NAI/NAI	C
20	rs3733542	50.07	49.69	NAI/NAI	C
	rs41115	53.99	50.71	NAI/NAI	C
	rs1050171	35.47	41.93	LPA/LPA	C
	rs2023748	41.4	46.13	LPA/NAI	D
21	rs1050171	49.13	47.1	NAI/NAI	C
	rs35775721	48.11	44.83	NAI/NAI	C
	rs33917957	46.52	42.93	NAI/LPA	D

22	rs56391007	53.05	50.68	NAI/NAI	C
	NM_001127500.1	49.54	49.94	NAI/NAI	C
	NM_001127500.1	45.63	47.9	NAI/NAI	C
	NM_001127500.1	53.3	51.89	NAI/NAI	C
	NM_033360.2	48.23	46.66	NAI/NAI	C
	rs1042522	53.09	54.2	NAI/NAI	C
23	rs55789615	50.07	50.03	NAI/NAI	C
	rs1050171	51.67	49.47	NAI/NAI	C
24	rs3733542	49.49	48.09	NAI/NAI	C
	rs41115	36.03	24.57	LPA/LPA	C
	rs1050171	50.49	50.7	NAI/NAI	C
	rs2023748	46.86	49.58	NAI/NAI	C
	rs41737	48.55	53.15	NAI/NAI	C
25	rs41115	48.3	49.92	NAI/NAI	C
	rs1050171	48.7	48.05	NAI/NAI	C
	rs1137282	53.07	53.17	NAI/NAI	C

*C= concordant, D=discordant, I=indeterminate, NAI=nil allelic imbalance, LPA= allelic imbalance with loss of polymorphic allele,
LWA= allelic imbalance with loss of wild-type allele