

Kemp et al 2007 Extraction

Total Copy # In	SD	Copy #/uL In	SD	Replicate #	Total Copy # Out	SD	Copy #/uL Out	SD	Retention (%)	Loss (%)	Average Loss (%)	SD
191603	5730	1916.03	57.30	1	6181	n/a	61.81	n/a	3.23	96.77		
				2	3451	n/a	34.51	n/a	1.80	98.20		
				3	undet	n/a	undet	n/a	undet	undet		
				4	1901	n/a	19.01	n/a	0.99	99.01		
				5	undet	n/a	undet	n/a	undet	undet		
				6	undet	n/a	undet	n/a	undet	undet		
				7	8683	n/a	86.83	n/a	4.53	95.47	97.36	1.56
64653	10781	646.53	107.81	1	81	55.40	0.81	5.54	0.13	99.87		
				2	16	n/a	0.16	n/a	0.02	99.98		
				3	16	n/a	0.16	n/a	0.02	99.98		
				4	27	n/a	0.27	n/a	0.04	99.96		
				5	undet	n/a	undet	n/a	undet	undet		
				6	undet	n/a	undet	n/a	undet	undet		
				7	38	n/a	0.38	n/a	0.06	99.94	99.94	0.04
177907	31882	1779.07	318.82	1	7	n/a	0.07	n/a	0.00	100.00		
				2	214	n/a	2.14	n/a	0.12	99.88		
				3	288	95.46	2.88	9.55	0.16	99.84		
				4	295	3.54	2.95	0.35	0.17	99.83		
				5	33	1.41	0.33	0.14	0.02	99.98		
				6	94	131.52	0.94	13.15	0.05	99.95		
				7	220	37.48	2.20	3.75	0.12	99.88	99.91	0.07
4919425	443094	49194.25	4430.94	1	undet	n/a	undet	n/a	undet	undet		
				2	undet	n/a	undet	n/a	undet	undet		
				3	440	171.83	4.40	17.18	0.01	99.99		
				4	undet	n/a	undet	n/a	undet	undet		
				5	192	n/a	1.92	n/a	0.00	100.00		
				6	581	125.87	5.81	12.59	0.01	99.99		
				7	undet	n/a	undet	n/a	undet	undet	99.99	0.00
4146910	99165	41469.10	991.65	1	1414	n/a	14.14	n/a	0.03	99.97		
				2	288	62.23	2.88	6.22	0.01	99.99		
				3	4103	603.16	41.03	60.32	0.10	99.90		
				4	undet	n/a	undet	n/a	undet	undet		
				5	892	n/a	8.92	n/a	0.02	99.98		
				6	2261	961.67	22.61	96.17	0.05	99.95		
				7	2327	93.34	23.27	9.33	0.06	99.94	99.95	0.03

Total across all experiments:	99.53	1.11
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Phenol-Chloroform

Total Copy # In	SD	Copy #/uL In	SD	Replicate #	Total Copy # Out	SD	Copy #/uL Out	SD	Retention (%)	Loss (%)	Average Loss (%)	SD
21548	1271.55	215.48	12.72	1	9046	40.40	90.46	0.40	41.98	58.02		
				2	8648	252.00	86.48	2.52	40.13	59.87		
				3	9687	875.00	96.87	8.75	44.96	55.04		
				4	8680	546.00	86.80	5.46	40.28	59.72		
				5	6615	401.00	66.15	4.01	30.70	69.30		
				6	10122	315.00	101.22	3.15	46.97	53.03	59.16	5.65

Total across all experiments: 59.16 5.65

Isopropanol Precipitation

Total Copy # In	SD	Copy #/uL In	SD	Replicate #	Total Copy # Out	SD	Copy #/uL Out	SD	Retention (%)	Loss (%)	Average Loss (%)	SD
21548	1271.55	215.48	12.72	1	104.00	0.40	1.04	0.004	0.48	99.52		
				2	178.00	16.90	1.78	0.169	0.83	99.17		
				3	128.00	115.00	1.28	1.150	0.59	99.41		
				4	148.00	35.40	1.48	0.354	0.69	99.31	99.35	0.15

Total across all experiments:	99.35 0.15
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Microconcentrator - Millipore (angled filter)

Total Copy # In	SD	Copy #/uL In	SD	Replicate #	Total Copy # Out	SD	Copy #/uL Out	SD	Retention (%)	Loss (%)	Average Loss (%)	SD
21548	1271.55	215.48	12.72	1	2237	60.20	22.37	0.60	10.38	89.62		
				2	11955	940.00	119.55	9.40	55.48	44.52		
				3	129	48.80	1.29	0.49	0.60	99.40		
				4	3352	821.00	33.52	8.21	15.56	84.44	79.50	24.13

Total across all experiments: 79.50 24.13

Silica-based Purification using the Wizard PCR Preps Purification System													
Protocol	Total Copy # In	In SD	Copy #/ul In	SD	Replicate #	Total Copy # Out	SD	Copy #/ul Out	SD	Retention (%)	Loss (%)	Average Loss (%)	SD
Normal	1234513	1177.98	12345.13	1177.98	1	495,150	95000.00	495,150	95000	96.56	3.04	63.04	
					2	405,893	176000.00	405,893	176000	32.88	67.12		
					3	183,865	173000.00	183,865	173000	14.90	85.10		
					4	204,061	587000.00	204,061	587000	16.63	83.37		
					5	274,916	77100.00	274,916	77100	22.27	77.73		
					6	349,190	125000.00	349,190	125000	28.28	71.71	74.69	8.91
Normal with elution in TE	959417	14,154	9594.17	141.54	1	490,140	152733.00	490,140	152733	61.09	48.91		
					2	445,271	317722.00	445,271	317722	46.41	53.59		
					3	352,477	137966.00	352,477	137966	36.74	63.26		
					4	464,337	71166.00	464,337	71166	48.09	51.91	54.42	6.20
250 ul resin	961391	32,742	9613.91	327.42	1	125,036	86133.00	125,036	86133	13.01	86.99		
					2	163,738	160900.00	163,738	160900	12.67	87.33	87.01	0.02
250 ul resin	4919420	443,094	49194.20	4430.94	1	1,932,000	248990.00	1,932,000	248990	39.27	60.73		
					2	3,788,210	821000.00	3,788,210	821000	77.01	22.99	41.86	26.68
500 ul resin	961391	32,742	9613.91	327.42	1	360,858	4461.00	360,858	4461	37.74	62.26		
					2	330,458	138777.00	330,458	138777	34.37	65.63	63.94	2.38
500 ul resin	4919420	443,094	49194.20	4430.94	1	3,297,070	225381.00	3,297,070	225381	65.80	34.20		
					2	4,354,490	155212.00	4,354,490	155212	88.52	11.48	22.84	16.06
750 ul resin	961391	32,742	9613.91	327.42	1	532,418	21362.00	532,418	21362	55.38	44.62		
					2	551,777	141300.00	551,777	141300	57.39	42.61	43.81	1.42
750 ul resin	4919420	443,094	49194.20	4430.94	1	4,578,100	210922.00	4,578,100	210922	39.02	60.98		
					2	4,100,050	307000.00	4,100,050	307000	83.34	16.66	11.82	6.84
1.25 mL resin	1217840	33,807	12178.40	338.07	1	758,987	199000.00	758,987	199000	62.32	37.68		
					2	646,093	329000.00	646,093	329000	52.89	47.11	42.39	6.67
1.5 mL resin	1217840	33,807	12178.40	338.07	1	748,633	744000.00	748,633	744000	61.47	38.53		
					2	607,940	729000.00	607,940	729000	49.92	50.08	44.30	8.17
1.75 mL resin	1217840	33,807	12178.40	338.07	1	718,470	781000.00	718,470	781000	59.00	41.00		
					2	618,650	324000.00	618,650	324000	50.89	49.10	45.10	5.80
2 mL resin	1217840	33,807	12178.40	338.07	1	644,927	47900.00	644,927	47900	52.96	47.04		
					2	629,892	101000.00	629,892	101000	51.64	48.36	47.70	0.93
250 ul resin + sodium acetate	961391	32,742	9613.91	327.42	1	28,493	1630.00	28,493	1630	2.96	97.04		
					2	161,621	80533.00	161,621	80533	16.81	83.19	90.11	9.79
250 ul resin + sodium acetate	4919420	443,094	49194.20	4430.94	1	2,396,240	330000.00	2,396,240	330000	48.71	51.29		
					2	2,185,520	78600.00	2,185,520	78600	44.62	55.38	53.84	3.32
500 ul resin + sodium acetate	961391	32,742	9613.91	327.42	1	384,634	94333.00	384,634	94333	40.01	59.99		
					2	379,291	87777.00	379,291	87777	38.35	60.65	60.32	0.47
500 ul resin + sodium acetate	4919420	443,094	49194.20	4430.94	1	2,333,880	130688.00	2,333,880	130688	47.44	52.56		
					2	3,106,960	230000.00	3,106,960	230000	63.16	36.84	44.70	11.11
750 ul resin + sodium acetate	961391	32,742	9613.91	327.42	1	318,515	99488.00	318,515	99488	33.13	66.87		
					2	599,384	189922.00	599,384	189922	62.35	37.65	52.26	20.66
750 ul resin + sodium acetate	4919420	443,094	49194.20	4430.94	1	2,876,880	133637.00	2,876,880	133637	58.52	41.48		
					2	2,495,150	138655.00	2,495,150	138655	45.66	54.34	47.91	9.09
1 mL resin + sodium acetate	969417	14,154	9694.17	141.54	1	171,066	6990.00	171,066	6990	17.83	82.17		
					2	161,837	16333.00	161,837	16333	16.86	83.15	82.66	0.69
100 ul resin + NaOH	1698470	191,039	16984.70	1910.39	1	257,831	37601.00	257,831	37601	15.18	84.82		
					2	781,515	371000.00	781,515	371000	48.01	51.99		
					3	315,291	76900.00	315,291	76900	18.66	81.34		
					4	396,014	91312.00	396,014	91312	23.32	76.68	74.23	13.90
1 mL resin + NaOH	1698470	191,039	16984.70	1910.39	1	288,027	22754.00	288,027	22754	16.96	83.04		
					2	300,849	16187.00	300,849	16187	17.71	82.29		
					3	352,414	37168.00	352,414	37168	20.75	79.25		
					4	319,288	7261.00	319,288	7261	18.80	81.20	81.45	1.65
2 mL resin + NaOH	1698470	191,039	16984.70	1910.39	1	141,381	12635.35	141,381	12635	8.32	91.68		
					2	25,933	4690.00	25,933	4690	1.53	98.47		
					3	176,653	5805.00	176,653	5805	10.34	89.66		
					4	206,645	77890.00	206,645	77890	12.17	87.83	91.91	4.65
100 ul Wizard resin + 800 ul GM	13671	1,593	136.71	15.93	1	611	72.00	611	0.72	10.47	89.53		
					2	1372	429.00	1372	6.76	3.09	96.91	92.72	3.87
100 ul Wizard resin + 800 ul GM	39281	13,540	392.81	135.40	1	6,676	2104.00	6,676	76.76	21.04	24.63	75.37	
					2	8,301	585.00	8,301	5.85	23.68	76.32	75.84	0.68
100 ul Wizard resin + 800 ul GM	1815210	324,421	18152.10	3244.21	1	899,016	74431.00	899,016	74431	49.53	50.47		
					2	1,029,080	91796.00	1,029,080	91796	54.69	45.31		
					3	811,283	36731.00	811,283	36731	44.69	55.31		
					4	394,140	67824.00	394,140	67824	21.21	78.79	56.84	15.12
250 ul Wizard resin + 650 ul GM	13671	1,593	136.71	15.93	1	3118	174.00	3118	174	22.81	77.19		
					2	2958	341.00	2958	341	21.64	78.36	77.78	0.83
250 ul Wizard resin + 650 ul GM	39281	13,540	392.81	135.40	1	29,514	2386.00	29,514	2386	75.14	24.86		
					2	608	n/a	608	n/a	n/a	n/a	24.86	n/a
250 ul Wizard resin + 650 ul GM	1815210	324,421	18152.10	3244.21	1	1,182,720	367407.00	1,182,720	367407	65.16	34.84		
					2	337,913	19105.00	337,913	19105	18.99	81.01		
					3	992,755	53701.00	992,755	53701	32.65	67.35		
					4	780,941	38298.00	780,941	38298	43.02	56.98	60.14	19.61
500 ul Wizard resin + 400 ul GM	13671	1,593	136.71	15.93	1	9129	537.00	9129	537	52.10	47.90		
					2	4517	561.00	4517	5.61	33.04	66.96	57.43	13.48
500 ul Wizard resin + 400 ul GM	39281	13,540	392.81	135.40	1	34,580	5375.00	34,580	5375	88.03	11.97		
					2	18,366	2436.00	18,366	2436	31.16	68.84	39.62	29.20
500 ul Wizard resin + 400 ul GM	1815210	324,421	18152.10	3244.21	1	851,034	181893.00	851,034	181893	46.88	53.12		
					2	1,428,780	54270.00	1,428,780	54270	78.71	21.29		
					3	1,235,670	109319.00	1,235,670	109319	23.25	26.75		
					4	1,074,150	89032.00	1,074,150	89032	59.17	40.83	35.49	14.34
750 ul Wizard resin + 150 ul GM	13671	1,593	136.71	15.93	1	7236	371.00	7236	3.71	52.93	47.07		
					2	7162	187.00	7162	1.67	52.39	47.61		
750 ul Wizard resin + 150 ul GM	39281	13,540	392.81	135.40	1	41,173	1410.00	41,173	14.10	104.82	-4.82		
					2	32,239	5443.00	32,239	5443	82.07	17.93	6.56	16.08
750 ul Wizard resin + 150 ul GM	1815210	324,421	18152.10	3244.21	1	1,692,670	69848.00	1,692,670	69848	93.25	6.75		
					2	1,196,580	164360.00	1,196,580	164360	65.92	34.0		

Protocol	Total Copy # In	SD	Copy #/uL In	SD	Replicate #	Total Copy # Out	SD	Copy #/uL Out	SD	Retention (%)	Loss (%)	Average Loss (%)	SD
QIAquick PCR Purification Kit	21,548	1271.55	215.48	12.7155	1	530	153	5	1.53	2.46	97.54		
					2	11,652	9.2	117	0.09	54.07	45.93		
					3	457	159	5	1.59	2.12	97.88		
					4	12,138	7.5	121	0.08	56.33	43.67	71.25	30.56
MoBio -Ultra Clean DNA Purification Kit	50,238	5,920	502.38	59.2	1	32	21	0	0	0.06	99.94		
					2	28	n/a	0	n/a	0.06	99.94		
					3	undet	n/a	undet	n/a	undet	undet		
					4	2416	883	24	9	4.81	95.19	98.36	2.74
Geneclean-QBiogene	50,238	5,920	502.38	59.2	1	1610	74	16	1	3.20	96.80		
					2	1001	238	10	2	1.99	98.01		
					3	928	412	9	4	1.85	98.15		
					4	1445	511	14	5	2.88	97.12	97.52	0.66