

S2 Table. Detailed sequencing data of tumor tissue, serial plasma and paired WBCs samples

Sample ID	Sample type	Average sequencing depth on target (×)	Fraction of effective bases on target (%)	Mapping rate (%)	Fraction of effective reads on target (%)	Fraction of target covered with $\geq 50\times$ (%)
P01-B1	Plasma	1,976	64.01	99.85	60.77	99.94
P01-B2	Plasma	1,917	61.75	99.83	59.27	99.94
P01-B3	Plasma	1,849	37.00	99.82	35.66	99.82
P01-B4	Plasma	1,349	51.70	99.80	49.34	99.95
P03-B1	Plasma	1,878	61.21	99.87	58.63	99.93
P03-B2	Plasma	2,207	64.53	99.88	61.89	99.94
P03-B4	Plasma	3,380	52.08	99.91	50.45	99.95
P04-B1	Plasma	1,658	59.29	99.84	56.97	99.93
P04-B2	Plasma	1,619	61.10	99.85	58.73	99.91
P04-B3	Plasma	3,904	59.54	99.75	56.52	99.95
P04-B4	Plasma	2,519	56.28	99.80	54.15	99.94
P05-B1	Plasma	2,024	61.92	99.84	59.13	99.98
P05-B2	Plasma	2,014	54.96	99.79	52.98	99.87
P06-B1	Plasma	1,887	61.32	99.84	58.95	99.97
P06-B2	Plasma	3,109	58.70	99.86	56.28	99.87
P06-B4	Plasma	2,675	60.21	99.87	57.22	99.99
P07-B1	Plasma	4,004	60.96	99.86	58.25	99.84
P07-B2	Plasma	4,294	62.58	99.84	60.30	99.84
P07-B3	Plasma	3,447	61.44	99.88	59.25	99.96
P08-B1	Plasma	3,509	62.24	99.53	59.19	99.84
P08-B2	Plasma	2,873	62.40	99.86	60.06	99.84
P09-B1	Plasma	2,359	56.05	99.80	53.86	99.84
P09-B2	Plasma	2,823	58.93	99.79	56.87	99.85
P09-B3	Plasma	2,595	52.76	99.75	50.89	99.96
P10-B1	Plasma	2,729	57.38	99.41	55.27	99.88
P11-B1	Plasma	2,821	54.87	99.84	52.66	99.85
P11-B2	Plasma	2,430	57.69	99.76	55.61	99.84
P12-B1	Plasma	2,177	55.48	99.79	53.30	99.87
P12-B3	Plasma	2,116	52.64	99.85	50.52	99.98
P13-B1	Plasma	1,775	52.95	99.81	50.79	99.86
P13-B2	Plasma	1,530	47.41	99.69	45.67	99.86
P13-B3	Plasma	1,928	50.51	99.84	48.64	99.98
P14-B1	Plasma	3,163	58.33	99.85	56.00	99.85
P14-B2	Plasma	2,850	53.31	99.85	51.27	99.84

P14-B3	Plasma	2,241	51.36	99.80	49.57	99.96
P14-B4	Plasma	2,935	57.11	99.97	56.23	99.96
P15-B1	Plasma	2,510	53.57	99.78	51.33	99.87
P15-B2	Plasma	2,964	50.81	99.87	48.90	99.99
P15-B3	Plasma	1,942	58.42	99.75	56.30	99.98
P16-B1	Plasma	4,633	61.08	99.81	58.13	99.87
P17-B1	Plasma	3,704	60.27	99.86	57.52	99.87
P17-B2	Plasma	2,273	49.41	99.85	47.77	99.99
P17-B3	Plasma	1,291	50.30	99.75	48.11	99.98
P17-B4	Plasma	4,013	65.94	99.80	63.21	99.99
P18-B1	Plasma	3,002	57.36	99.81	55.32	99.84
P18-B2	Plasma	2,761	52.12	99.83	50.47	99.95
P18-B4	Plasma	3,523	54.41	99.86	52.28	99.95
P19-B1	Plasma	3,474	56.61	99.83	53.69	99.86
P19-B2	Plasma	2,114	52.83	99.87	51.01	99.99
P19-B3	Plasma	883	54.70	99.97	53.82	99.98
P20-B1	Plasma	2,053	26.58	99.86	25.52	99.83
P20-B2	Plasma	3,745	55.07	99.91	53.30	99.96
P20-B3	Plasma	2,021	61.08	99.79	58.63	99.96
P20-B4	Plasma	5,003	67.22	99.86	64.84	99.96
P21-B1	Plasma	3,253	61.50	99.81	58.42	99.83
P21-B2	Plasma	1,039	40.77	99.82	39.36	99.96
P21-B3	Plasma	1,486	52.38	99.81	50.24	99.95
P22-B1	Plasma	2,712	57.74	99.80	55.61	99.84
P22-B2	Plasma	1,689	51.50	99.88	49.83	99.96
P22-B3	Plasma	2,320	51.20	99.83	49.20	99.95
P25-B1	Plasma	3,637	60.07	99.76	57.71	99.85
P25-B2	Plasma	1,708	54.91	99.84	52.41	99.96
P26-B1	Plasma	2,952	51.43	99.83	49.78	99.99
P26-B2	Plasma	3,404	58.59	99.84	55.64	99.99
P26-B3	Plasma	1,933	56.99	99.85	54.37	99.98
P26-B4	Plasma	3,236	51.11	99.97	50.36	99.98
P27-B1	Plasma	4,237	60.96	99.90	58.29	99.96
P28-B1	Plasma	4,270	63.38	99.85	60.15	99.96
P28-B2	Plasma	3,507	56.48	99.86	54.28	99.96
P29-B1	Plasma	3,754	62.10	99.85	59.18	99.95
P29-B2	Plasma	2,865	54.58	99.83	52.40	99.95
P29-B4	Plasma	3,834	62.53	99.85	59.79	99.95
P30-B1	Plasma	3,065	56.90	99.84	54.62	99.96

P30-B2	Plasma	3,402	56.95	99.85	54.78	99.96
P31-B1	Plasma	3,673	56.87	99.84	54.49	99.95
P31-B2	Plasma	3,565	58.43	99.87	55.97	99.95
P31-B4	Plasma	3,318	56.90	99.81	55.02	99.95
P32-B1	Plasma	3,076	50.60	99.82	48.64	99.96
P32-B2	Plasma	2,267	50.86	99.84	49.13	99.96
P32-B4	Plasma	4,085	64.42	99.87	61.92	99.95
P33-B1	Plasma	3,968	55.44	99.87	53.04	99.96
P33-B2	Plasma	2,369	54.40	99.81	52.54	99.96
P33-B3	Plasma	1,191	43.10	99.79	42.39	99.95
P34-B1	Plasma	2,833	56.84	99.86	54.79	99.99
P34-B2	Plasma	2,842	52.11	99.86	50.16	99.99
P34-B3	Plasma	2,243	45.38	99.80	43.73	99.99
P35-B1	Plasma	1,891	50.98	99.83	49.09	99.96
P35-B2	Plasma	2,198	50.52	99.81	48.69	99.96
P35-B4	Plasma	3,909	54.50	99.83	52.37	99.96
P36-B1	Plasma	2,196	49.60	99.94	47.83	99.95
P36-B2	Plasma	1,685	52.62	99.96	50.91	99.95
P36-B3	Plasma	1,513	44.12	99.93	42.63	99.95
P37-B1	Plasma	2,666	48.12	99.90	46.03	99.96
P38-B1	Plasma	1,240	38.82	99.91	37.40	99.95
P38-B2	Plasma	1,428	39.89	99.90	38.53	99.94
P38-B4	Plasma	1,083	40.53	99.92	39.14	99.94
P01-T1	Tissue	605	37.93	99.70	36.27	99.92
P04-T1	Tissue	564	39.76	99.70	37.77	99.95
P05-T1	Tissue	604	60.24	99.87	57.79	99.96
P06-T1	Tissue	455	33.24	99.67	31.68	99.97
P07-T1	Tissue	1,441	54.32	99.72	52.19	99.84
P08-T1	Tissue	2,323	61.69	99.77	58.88	99.78
P09-T1	Tissue	1,208	60.11	99.76	57.54	99.82
P10-T1	Tissue	1,052	57.65	99.74	55.19	99.87
P11-T1	Tissue	751	55.75	99.77	53.35	99.72
P12-T1	Tissue	1,439	60.92	99.48	57.66	99.83
P13-T1	Tissue	892	55.55	99.72	53.03	99.85
P15-T1	Tissue	459	56.60	99.71	53.75	99.81
P16-T1	Tissue	834	60.11	99.18	57.47	99.83
P17-T1	Tissue	843	56.96	99.63	54.37	99.84
P18-T1	Tissue	550	56.22	99.67	53.48	99.82
P19-T1	Tissue	535	53.70	99.61	51.38	99.82

P20-T1	Tissue	976	57.21	98.22	54.83	99.77
P21-T1	Tissue	839	54.92	99.64	52.95	99.95
P22-T1	Tissue	724	51.60	99.51	49.63	99.95
P25-T1	Tissue	913	56.08	99.60	53.96	99.96
P26-T1	Tissue	943	52.38	99.67	50.36	99.95
P27-T1	Tissue	1,688	57.14	99.86	54.81	99.96
P28-T1	Tissue	1,350	61.50	99.79	58.44	99.86
P29-T1	Tissue	824	59.01	99.70	55.96	99.93
P30-T1	Tissue	531	56.23	99.72	54.03	99.92
P31-T1	Tissue	817	61.88	98.98	58.83	99.94
P32-T1	Tissue	1,642	60.99	99.75	58.28	99.95
P33-T1	Tissue	150	45.00	96.34	42.84	99.23
P34-T1	Tissue	1,065	60.05	99.71	57.30	99.98
P35-T1	Tissue	863	56.95	99.72	54.61	99.95
P01-Normal-1	WBC	1,247	59.22	99.82	57.03	99.93
P01-Normal-3	WBC	563	59.15	99.77	56.84	99.79
P03-Normal-1	WBC	1,271	60.04	99.85	57.77	99.93
P03-Normal-3	WBC	1,256	57.66	99.82	55.45	99.94
P04-Normal-1	WBC	618	46.99	99.66	45.39	99.93
P04-Normal-3	WBC	211	46.61	99.94	44.96	98.61
P05-Normal-1	WBC	524	41.16	99.66	39.78	99.98
P05-Normal-2	WBC	527	53.03	99.80	51.03	99.84
P06-Normal-1	WBC	1,518	59.43	99.82	57.16	99.97
P06-Normal-2	WBC	709	55.02	99.80	52.73	99.84
P07-Normal	WBC	397	52.16	99.80	50.18	99.80
P08-Normal	WBC	1,600	53.57	99.81	51.48	99.85
P09-Normal	WBC	582	54.58	99.82	52.47	99.82
P10-Normal	WBC	567	56.83	99.77	54.70	99.85
P11-Normal	WBC	561	56.57	99.80	54.39	99.80
P12-Normal	WBC	606	56.10	99.81	54.01	99.83
P13-Normal	WBC	508	54.79	99.80	52.78	99.83
P14-Normal	WBC	1,419	54.38	99.80	52.29	99.85
P15-Normal	WBC	666	57.52	99.78	55.26	99.85
P16-Normal	WBC	692	57.89	99.78	55.63	99.84
P17-Normal	WBC	676	59.05	99.79	56.76	99.83
P18-Normal	WBC	767	58.81	99.78	56.43	99.80
P19-Normal	WBC	529	58.77	99.77	56.48	99.82
P20-Normal	WBC	719	58.92	99.79	56.64	99.81
P21-Normal	WBC	681	58.65	99.79	56.26	99.79

P22-Normal	WBC	436	32.92	99.68	31.61	99.78
P25-Normal	WBC	539	58.27	99.78	56.04	99.80
P26-Normal	WBC	310	52.86	99.57	51.14	99.97
P27-Normal	WBC	447	55.62	99.85	53.58	99.94
P28-Normal	WBC	431	60.54	99.82	57.73	99.94
P29-Normal	WBC	398	59.15	99.82	56.49	99.93
P30-Normal	WBC	569	59.41	99.83	56.81	99.95
P31-Normal	WBC	532	59.93	99.84	57.19	99.94
P32-Normal	WBC	357	59.92	99.83	57.56	99.93
P33-Normal	WBC	237	59.74	99.83	57.45	99.86
P34-Normal	WBC	291	60.04	99.82	57.64	99.96
P35-Normal	WBC	261	61.45	99.82	58.94	99.89
P36-Normal	WBC	530	55.44	99.96	53.38	99.93
P37-Normal	WBC	659	57.73	99.96	55.46	99.94
P38-Normal	WBC	460	58.30	99.94	56.01	99.92

WBC, white blood cell.