

Whole sequencing

Adaptive sampling on OsHV-1 μ VarA



Figure Supplementary 1: Statistics of sequencing runs. Pie chart showing percentages reads sequenced and percentages of bases sequenced for each DNA samples sequenced from seven different HMW DNA extraction kits, for six ONT sequencing runs, along with some run characteristics: Flow cell batch number, number of flow cell washes, number of pores available before sequencing (i.e. flowcell check results), run duration, and total number of reads and bases sequenced.

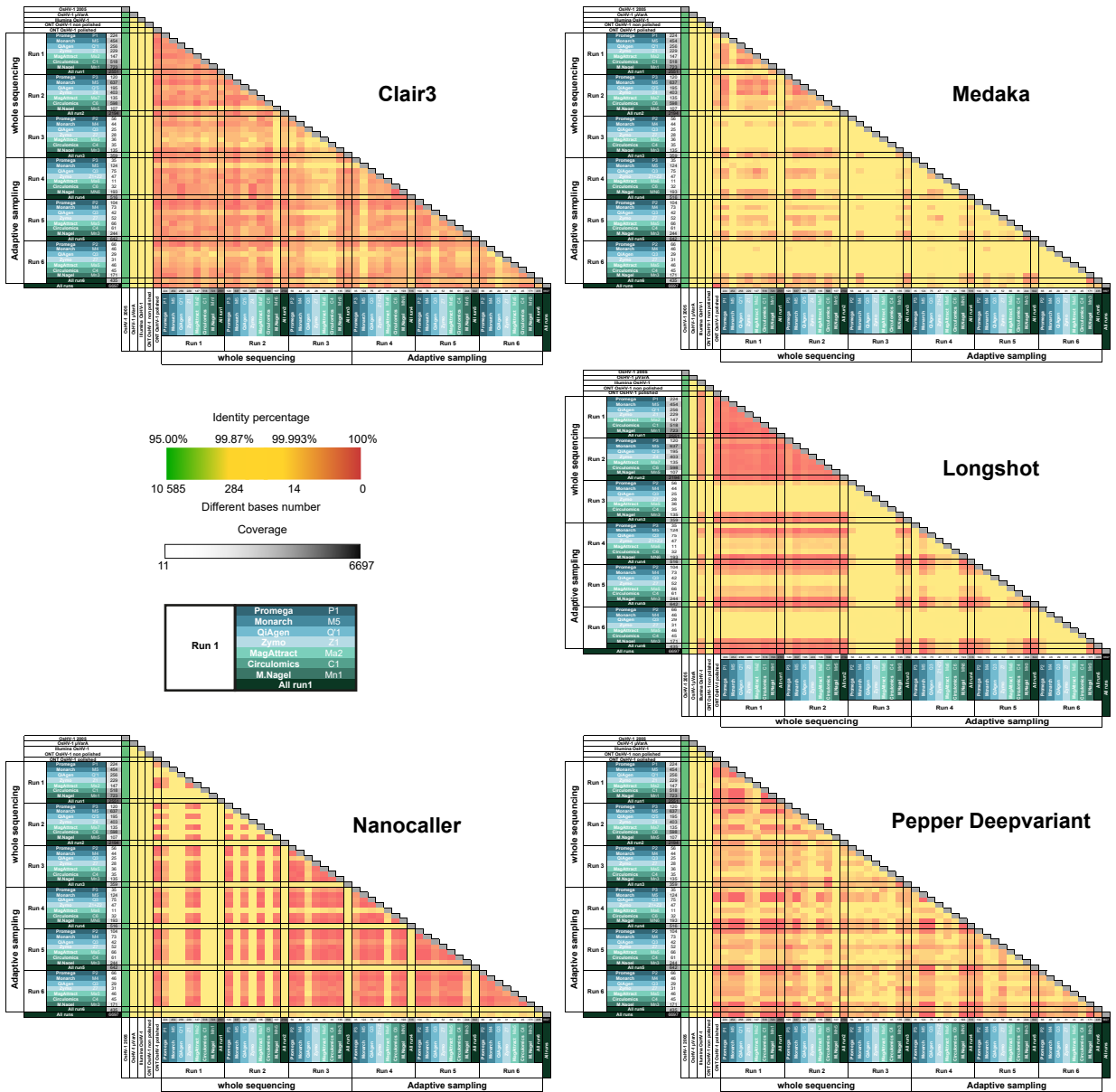


Figure Supplementary 2: Consensus caller evaluation. Each consensus caller was tested on 49 alignment files made by mapping reads coming from each sample and from each sequencing run, plus all reads pooled together from each run, plus all reads pooled together from all runs against the OsHV-1 ONT genome produced from all reads from all run and polished with medaka. The 49 OsHV-1 consensus sequences were aligned with the OsHV-1 reference sequence (GenBank: NC005881.2); OsHV-1 μ VarA (GenBank: KY242785.1), Illumina NR OsHV-1, and both polished and non-polished ONT OsHV-1 genomes. Pairwise percentage of identity and base number differences are color-coded from red (100% identity) to green. Average reads coverage for each alignment is color-coded from light grey (low coverage) to dark grey (high coverage).



Figure Supplementary 3: Structural variation of ONT reads from each library. Identification of the major structural variations (X deletion / duplication and US inversion) detected in each of the 42 ONT libraries. The OsHV-1 structure is shown with the specific regions: TRL/IRL (turquoise); UL (white); X (blue); TRS/IRS (grey); US (dark grey).

Table Supplementary 1: Virome characterisation results

Sequence name	Seq. technology	Aligned reads nb.	Max. score	Max. score group	Length	Hallmark	Viral	Cellular	Contig Length	Total genes	Viral genes	Host genes
contig_43	ONT	13	0,987	dsDNAphage	2452	1	60	0	2506	5	4	0
contig_695	ONT	19	0,507	dsDNAphage	18293	0	14,8	3,7	18326	29	3	4
contig_746	ONT	177	0,987	lavidaviridae	6900	0	16,7	0	8467	6	1	0
contig_883	ONT	38	1	lavidaviridae	2361	0	40	0	2577	5	0	0
contig_202	ONT	8	0,98	ssDNA	1206	0	33,3	0	1291	3	0	1
contig_885	ONT	59	0,98	lavidaviridae	1897	0	33,3	0	4750	3	0	0
contig_823	ONT	52	0,953	NCLDV	3057	0	50	0	3294	4	0	1
contig_36	ONT	63	0,947	lavidaviridae	4569	0	50	0	8102	2	0	0
contig_687	ONT	18	0,933	ssDNA	2083	0	33,3	0	3758	3	0	0
contig_435	ONT	51	0,9	ssDNA	2025	0	33,3	0	3163	3	0	0
contig_501	ONT	68	0,9	NCLDV	2415	0	33,3	0	2729	3	0	0
contig_768	ONT	89	0,9	lavidaviridae	4828	0	16,7	0	5647	6	0	0
contig_847	ONT	5	0,887	dsDNAphage	3749	0	71,4	0	3751	7	0	0
contig_1012	ONT	319	0,887	NCLDV	5498	0	50	0	6236	2	0	0
contig_347	ONT	75	0,88	lavidaviridae	4527	0	50	0	4824	2	0	0
contig_311	ONT	71	0,88	lavidaviridae	2590	0	25	0	5231	5	0	0
contig_1013	ONT	125	0,747	lavidaviridae	4962	0	50	0	6963	2	0	0
contig_1025	ONT	344	0,74	ssDNA	2147	0	33,3	0	4545	3	0	0
contig_59	ONT	92	0,72	lavidaviridae	5002	0	14,3	0	5402	7	0	0
contig_991	ONT	652	0,573	lavidaviridae	10717	0	11,1	0	12055	9	0	0
contig_905	ONT	7	0,5	NCLDV	12115	0	11,1	0	14269	14	0	0
NODE_5067	Illumina	255	0,953	dsDNAphage	2505	1	40	0	2506	5	3	0
NODE_10991	Illumina	27	0,987	dsDNAphage	1744	1	50	0	1756	5	2	0
NODE_82	Illumina	643	0,933	lavidaviridae	7782	0	18,2	0	7784	11	2	0
NODE_169	Illumina	1693	0,867	lavidaviridae	6802	0	50	0	6802	6	2	0
NODE_13874	Illumina	80	0,993	ssDNA	1384	0	50	0	1549	2	1	0
NODE_1807	Illumina	460	0,980	NCLDV	2556	0	25	0	3737	6	1	0
NODE_20410	Illumina	17	0,980	lavidaviridae	1234	0	33,3	0	1237	3	1	0
NODE_12227	Illumina	94	0,973	lavidaviridae	1202	0	50	0	1657	2	1	0
NODE_1082	Illumina	148	0,967	dsDNAphage	2369	1	20	0	4327	3	1	0
NODE_2404	Illumina	191	0,940	lavidaviridae	2878	0	25	0	3393	4	1	0
NODE_16521	Illumina	72	0,927	ssDNA	989	0	50	0	1403	2	1	0
NODE_199	Illumina	496	0,867	NCLDV	6480	0	10	0	6555	13	1	1
NODE_3364	Illumina	177	0,867	ssDNA	2679	0	25	0	2984	4	1	0
NODE_2432	Illumina	188	0,853	lavidaviridae	3187	0	16,7	0	3382	6	1	0
NODE_581	Illumina	448	0,820	NCLDV	2840	0	20	0	5115	5	1	0
NODE_3691	Illumina	132	0,753	ssDNA	2872	0	25	0	2873	6	1	0
NODE_22045	Illumina	23	0,687	NCLDV	680	0	50	0	1177	1	1	0
NODE_10532	Illumina	205	0,633	lavidaviridae	1621	0	33,3	0	1795	3	1	0
NODE_15636	Illumina	31	1	lavidaviridae	1444	0	33,3	0	1446	3	0	0
NODE_21682	Illumina	151	1	ssDNA	1186	0	33,3	0	1189	3	0	0
NODE_26231	Illumina	30	1	NCLDV	992	0	50	0	1057	2	0	0
NODE_893	Illumina	520	1	lavidaviridae	4539	0	25	0	4609	4	0	0
NODE_1208	Illumina	270	0,993	lavidaviridae	4188	0	40	0	4189	5	0	0
NODE_14558	Illumina	54	0,993	ssDNA	765	0	50	0	1505	2	0	0
NODE_25296	Illumina	24	0,993	ssDNA	1082	0	33,3	0	1082	3	0	0
NODE_6136	Illumina	142	0,993	ssDNA	1104	0	50	0	2309	2	0	1
NODE_12069	Illumina	332	0,987	ssDNA	1665	0	25	0	1668	4	0	0
NODE_15276	Illumina	153	0,987	ssDNA	958	0	50	0	1464	2	0	0
NODE_2157	Illumina	317	0,987	NCLDV	2970	0	50	0	3523	1	0	0
NODE_663	Illumina	336	0,987	lavidaviridae	3325	0	33,3	0	4978	1	0	0
NODE_3387	Illumina	230	0,98	ssDNA	543	0	50	0	2976	2	0	0
NODE_1034	Illumina	210	0,973	lavidaviridae	2591	0	50	0	4399	2	0	0
NODE_1097	Illumina	233	0,967	NCLDV	3985	0	50	0	4315	2	0	0
NODE_3726	Illumina	132	0,967	NCLDV	1642	0	50	0	2862	1	0	1
NODE_38	Illumina	737	0,967	lavidaviridae	7621	0	25	0	8988	3	0	0
NODE_496	Illumina	367	0,953	lavidaviridae	3793	0	33,3	0	5345	3	0	0
NODE_149	Illumina	1410	0,94	lavidaviridae	6890	0	50	0	7086	2	0	0
NODE_4703	Illumina	161	0,94	ssDNA	1588	0	33,3	0	2588	3	0	0
NODE_18169	Illumina	52	0,933	ssDNA	1194	0	33,3	0	1328	1	0	0
NODE_25859	Illumina	18	0,933	ssDNA	1063	0	33,3	0	1067	3	0	0
NODE_1374	Illumina	389	0,927	NCLDV	4056	0	33,3	0	4057	3	0	0
NODE_12177	Illumina	109	0,92	ssDNA	833	0	50	0	1660	2	0	0
NODE_2422	Illumina	437	0,913	lavidaviridae	3154	0	25	0	3384	4	0	0
NODE_10755	Illumina	347	0,907	lavidaviridae	1703	0	50	0	1774	2	0	0
NODE_17251	Illumina	159	0,907	ssDNA	1365	0	25	0	1367	4	0	0
NODE_26954	Illumina	32	0,907	NCLDV	521	0	50	0	1037	2	0	0
NODE_20	Illumina	1488	0,9	lavidaviridae	9244	0	33,3	0	10204	4	0	0
NODE_2154	Illumina	185	0,867	lavidaviridae	3404	0	20	0	3524	6	0	0
NODE_1748	Illumina	594	0,853	ssDNA	1394	0	33,3	0	3775	3	0	0
NODE_18962	Illumina	26	0,853	ssDNA	983	0	50	0	1295	2	0	0
NODE_1039	Illumina	334	0,827	ssDNA	540	0	50	0	4392	2	0	0
NODE_981	Illumina	250	0,813	lavidaviridae	4347	0	50	0	4484	2	0	0
NODE_304	Illumina	1690	0,807	lavidaviridae	6001	0	33,3	0	6002	2	0	0
NODE_1497	Illumina	1497	0,78	ssDNA	2894	0	40	0	3955	5	0	0
NODE_384	Illumina	449	0,78	lavidaviridae	5154	0	33,3	0	5689	3	0	0
NODE_1118	Illumina	374	0,767	dsDNAphage	3981	0	12,5	0	4270	8	0	0
NODE_160	Illumina	505	0,753	lavidaviridae	6185	0	20	0	6891	5	0	0
NODE_6729	Illumina	105	0,753	NCLDV	2158	0	33,3	0	2217	1	0	0
NODE_1134	Illumina	268	0,74	lavidaviridae	1525	0	50	0	4256	2	0	0
NODE_1478	Illumina	252	0,6	NCLDV	3927	0	50	0	3969	2	0	0
NODE_398	Illumina	349	0,527	NCLDV	4243	0	50	0	5634	2	0	0