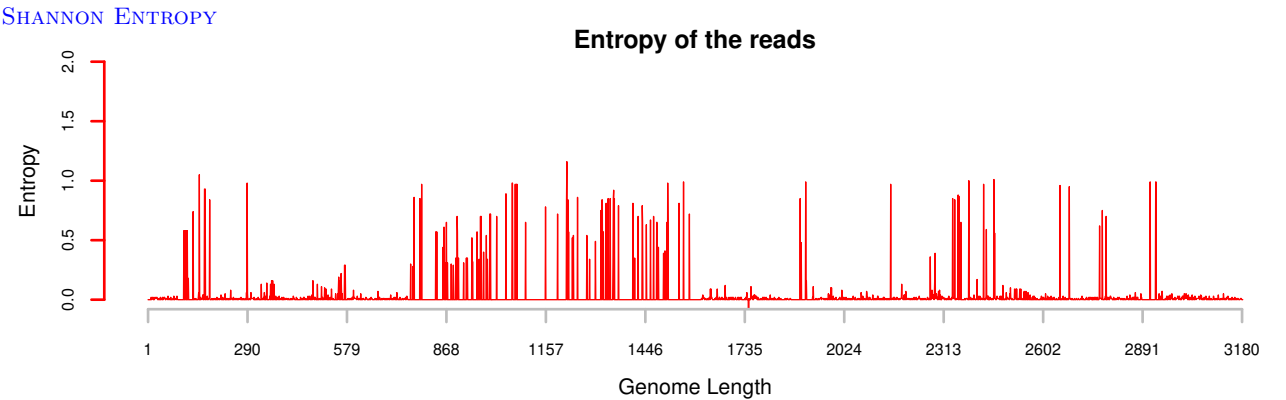
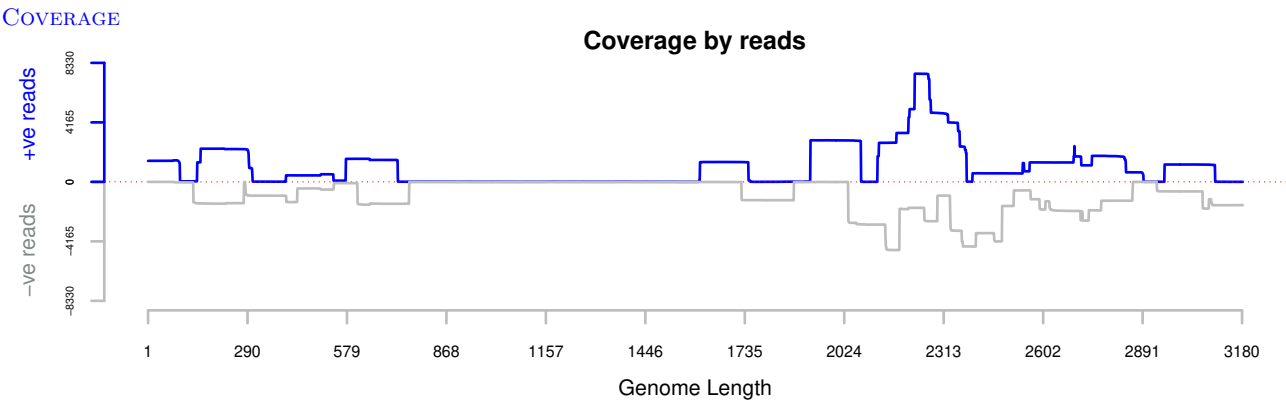
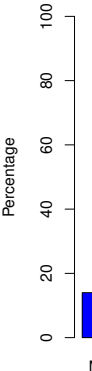


HBV-RYD-34

File name	HBV-RYD-34.sam
Ref name	KM606753.1 Hepatitis B virus isolate Cuba109, complete genome
Ref len	3182
Program used	Tanoti Assembler 1.0
Total reads	306808
Mapped reads	44347 (14.45%)
Unmapped reads	262461
Mapped loan pairs	735
Average read length	146nt
Coverage	3182nt (100.00%)
Average depth	2021 reads/site
Average insert length	11nt



CONSENSUS SEQUENCE

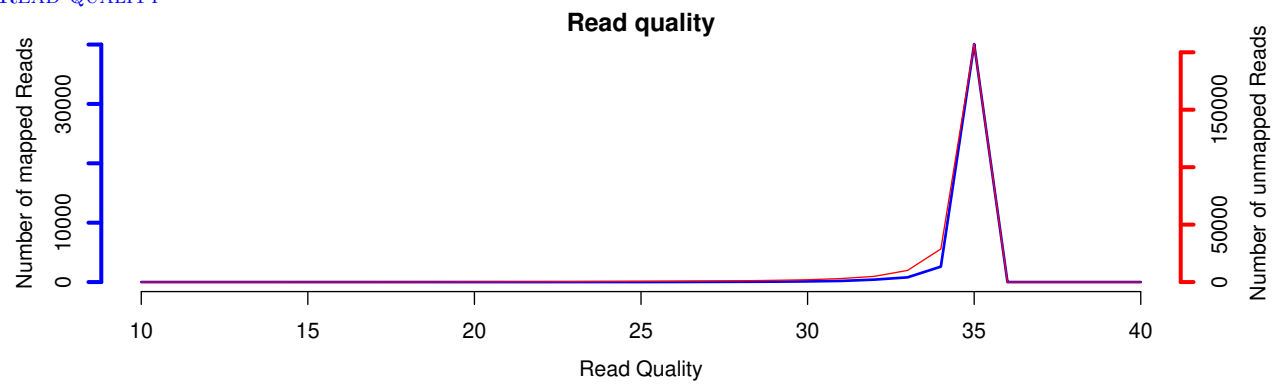
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140    ACCCTGCGCG GAACATGGAG AACATCACAT CAGGATTCCCT AGGACCCCTG CTCGTGTTAC AGGCGGGGTT
210    TTTCTTGTG ACAAGAATCC TCACAATACC GCAGAGTCTA GACTCGTGGT GGACTTCTCT CAATTTTCTA
280    GGGGGAACCA CCGTGTGTCT TGGCCAAAAT TCGCAGTCCC CAACCTCCAA TCACTACCA ACCTCTGTG
350    CTCCAAC TTA TCATGGTTAT CGCTGGATGT GTCTGCGGCG TTTTATCATC TTCCTCTTCA TCCTGCTGCT
420    ATGCTCATC TTCTTGTG TTTCTCTGGA CTATCAAGGT ATGTTGCCCC TTTGTCTCA AATTCCAGGA
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700    TTCGTAGGGC TTTCCCCAC TGTTTGGCTT TCAGTTATAT GGATGATGTG GTATTGGGGG CCAAGTCTGT
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840    AACAAAACAA AAAGATGGGG ATATTCCCTA AATTCATGG GTTATGTAAT TGGAAAGTTG GGATCATTGC
910    CACAGGAACA CATCAGAATG AAAATCAAAG ACTGTTT TAG AAAACTCCCT GTTAACCGGC CTATTGATTG
980    GAAAGTCTGT CAAAGAATTG TGGGTCTTTT GGGCTTTGCT GCCCCTTTTA CACAATGTGG ATATCCTGCT
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1120   TGTGTAAACA ATACCTGAAC CTTTACCCCG TTGCCCGCA ACGGCCAGGT CTGTGCCAAG TGTTTGCTGA
1190   TGCAACCCCC ACTGGCTGGG GCTTGGCCAT AGGCCATCAG CGCATGCGTG GAACCTTTGT GGTCTCTCTG
1260   CCGATCCATA CTGCGGAACCT CCTAGCCGCT TGTTTTGCTC GCAGCAGGTC TGGAGCGAAA CTTATCGGGA
1330   CAGATAATTC TGTCTTCTC TCAAGGAAAT ATACATCATT TCCATGGCTG CTAGGCTGTG CTGCCAACTG
1400   GATCCTGCGA GGGACGTCTT TTGTCTACGT CCCGTACGCG CTGAATCCTG CGGACGACCC GTCTCGGGGT
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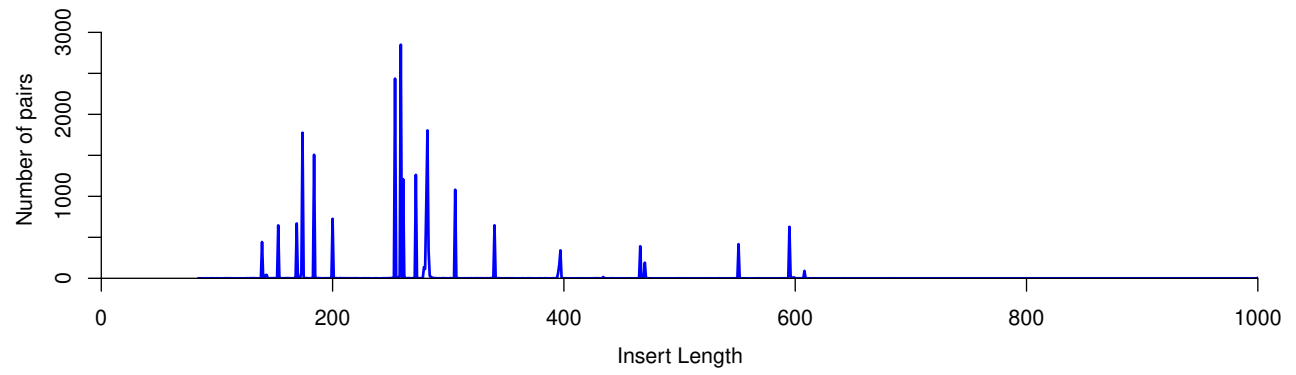
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Genome Composition	
A	750 (23.57%)
T	891 (28.00%)
G	689 (21.65%)
C	852 (26.78%)
N	0 (0.00%)
Total Nucleotides	3182
GC%	48.43

READ QUALITY



INSERT LENGTH DISTRIBUTION



AMINO ACID VARIATIONS

Protein	Position	Ref AA	Consensus AA	All AAs
P2	3	L	F	F::99.86(1472)
P2	4	P	Q	Q::99.66(1470)
P2	14	R	G	G::99.80(1473)
P2	36	S	S	S::86.11(62) T::13.89(10)
P2	38	I	I	I::86.11(62) L::13.89(10)
P2	55	H	H	H::65.29(2505) S::34.64(1329)
P2	96	Y	H	H::58.80(1841) Y::40.59(1271)
P2	171	L	M	M::98.41(1052)
P2	174	M	L	L::99.62(1062)
P2	190	Y	Y	Y::94.83(165) F::5.17(9)
P2	191	Q	Q	Q::94.83(165) K::5.17(9)
P2	254	K	K	K::94.44(17) R::5.56(1)
P2	263	F	Y	Y::72.73(16) F::27.27(6)
P2	265	A	S	S::60.87(14) A::39.13(9)
P2	285	W	W	W::90.91(20) *:9.09(2)
P2	286	G	G	G::90.00(18) E::10.00(2)
P2	290	H	N	N::94.44(17) H::5.56(1)
P2	298	C	S	S::93.33(14) C::6.67(1)
P2	299	Y	W	W::86.67(13) Y::6.67(1) F::6.67(1)
P2	305	D	E	E::100.00(17)
P2	308	I	R	R::93.33(14) I::6.67(1)
P2	309	Q	M	M::93.33(14) Q::6.67(1)
P2	313	E	D	D::88.24(15) E::11.76(2)
P2	314	C	C	C::94.12(16) Y::5.88(1)
P2	357	I	T	T::60.00(6) I::40.00(4)
P2	385	R	R	R::76.92(10) G::23.08(3)
P2	405	V	A	A::73.33(11) V::26.67(4)
P2	406	M	I	I::73.33(11) M::26.67(4)
P2	407	G	G	G::86.67(13) D::13.33(2)
P2	411	M	M	M::87.50(14) V::12.50(2)
P2	412	R	R	R::86.67(13) S::13.33(2)
P2	416	Q	V	V::71.43(10) L::28.57(4)
P2	425	E	E	E::87.50(14) K::12.50(2)
P2	433	R	R	R::88.89(16) H::11.11(2)
P2	439	N	K	K::78.57(11) N::21.43(3)
P2	440	I	L	L::73.33(11) I::26.67(4)
P2	441	L	I	I::86.67(13) L::13.33(2)
P2	450	S	S	S::94.44(17) Y::5.56(1)
P2	471	T	T	T::93.33(14) M::6.67(1)
P2	479	A	A	A::83.33(15) T::16.67(3)
P2	493	L	I	I::90.91(10) L::9.09(1)
P2	494	S	Y	Y::90.91(10) S::9.09(1)
P2	499	R	R	R::92.31(12) H::7.69(1)
P2	503	R	Q	Q::58.33(7) R::41.67(5)
P2	514	D	V	V::75.00(6) D::25.00(2)

P2	524	D	D	D::80.00(8) V::20.00(2)
S2	5	H	N	N::99.73(1471)
S2	35	V	V	V::86.11(62) A::13.89(10)
S2	37	P	H	H::86.11(62) L::13.89(10)
S2	44	R	K	K::79.22(61) R::20.78(16)
S2	50	L	R	R::50.94(1462) L::48.50(1392)
S2	55	I	I	I::65.29(2504) T::34.68(1330)
S2	56	T	T	T::65.35(2508) A::34.63(1329)
S2	60	L	L	L::73.57(2825) P::26.35(1012)
S2	120	C	Y	Y::97.65(954)
S2	121	P	H	H::97.65(955)
S2	160	L	Q	Q::97.80(891)
S2	191	T	T	T::94.83(165) S::5.17(9)
S2	223	W	*	*::99.15(3036) temp3:variations temp1:temp2 quality.eps:res mapPerc
S2	255	S	S	S::94.74(18) G::5.26(1)
S2	258	S	N	N::71.43(15) S::28.57(6)
S2	264	L	I	I::72.73(16) L::27.27(6)
X	22	G	S	S::76.47(13) D::17.65(3) G::5.88(1)
X	26	C	C	C::83.33(15) R::16.67(3)
X	30	F	V	V::82.35(14) F::17.65(3)
X	33	P	S	S::86.67(13) P::13.33(2)
X	36	T	D	D::83.33(10) T::16.67(2)
X	37	L	L	L::90.91(10) F::9.09(1)
X	44	A	A	A::91.67(11) T::8.33(1)
X	46	S	P	P::83.33(10) S::16.67(2)
X	47	S	A	A::83.33(10) T::16.67(2)
X	62	A	A	A::55.56(5) T::44.44(4)
X	127	I	T	T::98.83(1272)
X	130	K	M	M::99.61(1277)
X	131	V	I	I::99.84(1278)
C	12	T	S	S::98.53(2882)
C	29	D	Q	Q::98.70(2880)
C	58	A	E	E::99.26(2956)
C	87	S	S	S::60.33(4530) G::39.63(2976)
C	125	W	W	W::93.04(7874) *::6.85(580)
C	130	P	P	P::92.28(6995) S::7.64(579)
C	147	T	A	A::72.46(5467) T::27.40(2067)
C	149	V	I	I::72.79(5488) V::27.19(2050)
C	152	R	Q	Q::70.66(4928) R::29.29(2043)
C	153	G	C	C::70.73(4928) G::29.24(2037)
C	155	S	T	T::83.63(4929) S::16.36(964)
C	177	Q	Q	Q::59.91(2508) K::40.06(1677)
P1	17	E	N	N::70.64(4926) E::29.30(2043)
P1	27	R	H	H::54.64(2480) R::45.32(2057)
P1	44	G	G	G::85.75(3585) E::13.97(584)
P1	52	W	W	W::87.34(4105) *::12.40(583)
P1	154	A	A	A::84.69(3236) T::15.26(583)
P1	160	R	R	R::81.28(2545) K::18.65(584)
P1	174	T	S	S::99.94(3088)

P1	203	L	I	I::54.55(6) L::45.45(5)
P1	208	R	Q	Q::54.55(6) R::45.45(5)
P1	223	R	G	G::99.57(1873)
P1	234	T	A	A::99.73(1876)
P1	236	I	T	T::99.26(1867)
P1	250	S	G	G::99.68(1874)
P1	266	Y	H	H::99.88(1639)
P1	274	A	T	T::99.33(1628)
P1	285	S	T	T::99.76(1630)
S1	28	A	R	R::54.55(6) A::45.45(5)
S1	56	F	L	L::99.42(1870)

Meta data	
Assembly file:	HBV-RYD-34.sam
Annotation file:	/home3/vatt01s/Work/Project-150-HBV/Data/P150-1/Annotation/HBV.anno
Reference file:	KM606753.fa
User name	ales01a
Hostname	Alpha
Location	/home2/ales01a/HBV/P150-5/HBV-RYD-34
Date/Time	Fri 22 Mar 12:00:36 GMT 2019