**WTL1:**

HISAT2 summary stats:

Total pairs: 8191667

Aligned concordantly or discordantly 0 time: 2678191 (32.69%)

Aligned concordantly 1 time: 5377995 (65.65%)

Aligned concordantly >1 times: 135481 (1.65%)

Aligned discordantly 1 time: 0 (0.00%)

Total unpaired reads: 5356382 **(probably rRNA)**

Aligned 0 time: 5356382 (100.00%)

Aligned 1 time: 0 (0.00%)

Aligned >1 times: 0 (0.00%)

Overall alignment rate: 67.31%

Warning: Read M01942:5:000000000-A7DCY:1:2105:15986:16968 is ignored due to at least one of the mates' length < seed length 25! **but checked the cleaned files and everything looked fine? 🡪 *likely due to rRNA presence***

Bowtie2 summary stats:

8191667 reads; of these:

8191667 (100.00%) were paired; of these:

2607659 (31.83%) aligned concordantly 0 times

5398477 (65.90%) aligned concordantly exactly 1 time

185531 (2.26%) aligned concordantly >1 times

68.17% overall alignment rate

**WTL2:**

HISAT2 summary stats:

Total pairs: 6428652

Aligned concordantly or discordantly 0 time: 2159459 (33.59%)

Aligned concordantly 1 time: 4170504 (64.87%)

Aligned concordantly >1 times: 98689 (1.54%)

Aligned discordantly 1 time: 0 (0.00%)

Total unpaired reads: 4318918

Aligned 0 time: 4318918 (100.00%)

Aligned 1 time: 0 (0.00%)

Aligned >1 times: 0 (0.00%)

Overall alignment rate: 66.41%

Bowtie2 summary stats:

6428652 reads; of these:

6428652 (100.00%) were paired; of these:

2101888 (32.70%) aligned concordantly 0 times

4190035 (65.18%) aligned concordantly exactly 1 time

136729 (2.13%) aligned concordantly >1 times

67.30% overall alignment rate

**WTL3:**

HISAT2 summary stats:

Total pairs: 7348973

Aligned concordantly or discordantly 0 time: 2436185 (33.15%)

Aligned concordantly 1 time: 4763215 (64.81%)

Aligned concordantly >1 times: 149573 (2.04%)

Aligned discordantly 1 time: 0 (0.00%)

Total unpaired reads: 4872370

Aligned 0 time: 4872370 (100.00%)

Aligned 1 time: 0 (0.00%)

Aligned >1 times: 0 (0.00%)

Overall alignment rate: 66.85%

Bowtie2 summary stats:

7348973 reads; of these:

7348973 (100.00%) were paired; of these:

2266780 (30.84%) aligned concordantly 0 times

4875574 (66.34%) aligned concordantly exactly 1 time

206619 (2.81%) aligned concordantly >1 times

69.16% overall alignment rate

**WTD1:**

HISAT2 summary stats:

Total pairs: 4442749

Aligned concordantly or discordantly 0 time: 1470504 (33.10%)

Aligned concordantly 1 time: 2920305 (65.73%)

Aligned concordantly >1 times: 51940 (1.17%)

Aligned discordantly 1 time: 0 (0.00%)

Total unpaired reads: 2941008

Aligned 0 time: 2941008 (100.00%)

Aligned 1 time: 0 (0.00%)

Aligned >1 times: 0 (0.00%)

Overall alignment rate: 66.90%

Bowtie2 summary stats:

4442749 reads; of these:

4442749 (100.00%) were paired; of these:

1438420 (32.38%) aligned concordantly 0 times

2925857 (65.86%) aligned concordantly exactly 1 time

78472 (1.77%) aligned concordantly >1 times

67.62% overall alignment rate

**WTD2:**

HISAT2 summary stats:

Total pairs: 4633502

Aligned concordantly or discordantly 0 time: 1556352 (33.59%)

Aligned concordantly 1 time: 3014580 (65.06%)

Aligned concordantly >1 times: 62570 (1.35%)

Aligned discordantly 1 time: 0 (0.00%)

Total unpaired reads: 3112704

Aligned 0 time: 3112704 (100.00%)

Aligned 1 time: 0 (0.00%)

Aligned >1 times: 0 (0.00%)

Overall alignment rate: 66.41%

Bowtie2 summary stats:

4633502 reads; of these:

4633502 (100.00%) were paired; of these:

1524050 (32.89%) aligned concordantly 0 times

3020196 (65.18%) aligned concordantly exactly 1 time

89256 (1.93%) aligned concordantly >1 times

67.11% overall alignment rate

**WTD3:**

HISAT2 summary stats:

Total pairs: 4717348

Aligned concordantly or discordantly 0 time: 1741871 (36.92%)

Aligned concordantly 1 time: 2904748 (61.58%)

Aligned concordantly >1 times: 70729 (1.50%)

Aligned discordantly 1 time: 0 (0.00%)

Total unpaired reads: 3483742

Aligned 0 time: 3483742 (100.00%)

Aligned 1 time: 0 (0.00%)

Aligned >1 times: 0 (0.00%)

Overall alignment rate: 63.08%

Bowtie2 summary stats:

4717348 reads; of these:

4717348 (100.00%) were paired; of these:

1708569 (36.22%) aligned concordantly 0 times

2915098 (61.80%) aligned concordantly exactly 1 time

93681 (1.99%) aligned concordantly >1 times

63.78% overall alignment rate

**BlsAL1:**

HISAT2 summary stats:

Total pairs: 8812550

Aligned concordantly or discordantly 0 time: 3038235 (34.48%)

Aligned concordantly 1 time: 5573299 (63.24%)

Aligned concordantly >1 times: 201016 (2.28%)

Aligned discordantly 1 time: 0 (0.00%)

Total unpaired reads: 6076470

Aligned 0 time: 6076470 (100.00%)

Aligned 1 time: 0 (0.00%)

Aligned >1 times: 0 (0.00%)

Overall alignment rate: 65.52%

Bowtie2 summary stats:

8812550 reads; of these:

8812550 (100.00%) were paired; of these:

2844685 (32.28%) aligned concordantly 0 times

5702639 (64.71%) aligned concordantly exactly 1 time

265226 (3.01%) aligned concordantly >1 times

67.72% overall alignment rate

**BlsAL2:**

HISAT2 summary stats:

Total pairs: 6595187

Aligned concordantly or discordantly 0 time: 2269218 (34.41%)

Aligned concordantly 1 time: 4182769 (63.42%)

Aligned concordantly >1 times: 143200 (2.17%)

Aligned discordantly 1 time: 0 (0.00%)

Total unpaired reads: 4538436

Aligned 0 time: 4538436 (100.00%)

Aligned 1 time: 0 (0.00%)

Aligned >1 times: 0 (0.00%)

Overall alignment rate: 65.59%

Bowtie2 summary stats:

6595187 reads; of these:

6595187 (100.00%) were paired; of these:

2206216 (33.45%) aligned concordantly 0 times

4204307 (63.75%) aligned concordantly exactly 1 time

184664 (2.80%) aligned concordantly >1 times

66.55% overall alignment rate

**BlsAL3:**

HISAT2 summary stats:

Total pairs: 3635417

Aligned concordantly or discordantly 0 time: 1175208 (32.33%)

Aligned concordantly 1 time: 2397843 (65.96%)

Aligned concordantly >1 times: 62366 (1.72%)

Aligned discordantly 1 time: 0 (0.00%)

Total unpaired reads: 2350416

Aligned 0 time: 2350416 (100.00%)

Aligned 1 time: 0 (0.00%)

Aligned >1 times: 0 (0.00%)

Overall alignment rate: 67.67%

Bowtie2 summary stats:

3635417 reads; of these:

3635417 (100.00%) were paired; of these:

1147371 (31.56%) aligned concordantly 0 times

2403947 (66.13%) aligned concordantly exactly 1 time

84099 (2.31%) aligned concordantly >1 times

68.44% overall alignment rate

**BlsAD1:**

HISAT2 summary stats:

Total pairs: 4839032

Aligned concordantly or discordantly 0 time: 1729013 (35.73%)

Aligned concordantly 1 time: 2989281 (61.77%)

Aligned concordantly >1 times: 120738 (2.50%)

Aligned discordantly 1 time: 0 (0.00%)

Total unpaired reads: 3458026

Aligned 0 time: 3458026 (100.00%)

Aligned 1 time: 0 (0.00%)

Aligned >1 times: 0 (0.00%)

Overall alignment rate: 64.27%

Bowtie2 summary stats

4839032 reads; of these:

4839032 (100.00%) were paired; of these:

1693241 (34.99%) aligned concordantly 0 times

2997755 (61.95%) aligned concordantly exactly 1 time

148036 (3.06%) aligned concordantly >1 times

65.01% overall alignment rate

**BlsAD2:**

HISAT2 summary stats:

Total pairs: 9081938

Aligned concordantly or discordantly 0 time: 3138113 (34.55%)

Aligned concordantly 1 time: 5696191 (62.72%)

Aligned concordantly >1 times: 247634 (2.73%)

Aligned discordantly 1 time: 0 (0.00%)

Total unpaired reads: 6276226

Aligned 0 time: 6276226 (100.00%)

Aligned 1 time: 0 (0.00%)

Aligned >1 times: 0 (0.00%)

Overall alignment rate: 65.45%

Bowtie2 summary stats:

9081938 reads; of these:

9081938 (100.00%) were paired; of these:

3063217 (33.73%) aligned concordantly 0 times

5718251 (62.96%) aligned concordantly exactly 1 time

300470 (3.31%) aligned concordantly >1 times

66.27% overall alignment rate

**BlsAD3:**

HISAT2 summary stats:

Total pairs: 10760765

Aligned concordantly or discordantly 0 time: 2810775 (26.12%)

Aligned concordantly 1 time: 5157888 (47.93%)

Aligned concordantly >1 times: 2792102 (25.95%)

Aligned discordantly 1 time: 0 (0.00%)

Total unpaired reads: 5621550

Aligned 0 time: 5621550 (100.00%)

Aligned 1 time: 0 (0.00%)

Aligned >1 times: 0 (0.00%)

Overall alignment rate: 73.88%

Bowtie2 summary:

10760765 reads; of these:

10760765 (100.00%) were paired; of these:

2747517 (25.53%) aligned concordantly 0 times

5173726 (48.08%) aligned concordantly exactly 1 time

2839522 (26.39%) aligned concordantly >1 times

74.47% overall alignment rate