

PlasmidExpress

Whole Plasmid Sequencing – Results Example

Results Deliverables: Six data files per sample analyzed

1. **“.pdf”** – A report with the summary of results and data
2. **“contig.fas”** – A continuous sequence with annotations resulting from the reassembly of the passed reads generated by the nanopore sequencing analysis [**Note:** You may use SnapGene viewer (free download: <https://www.snapgene.com/snapgene-viewer>), or other software to visualize the annotation as a plasmid circle map or linear map to analyze the sequence]
3. **“contig._chrom.csv”** – List of the whole sequence determined (open via Microsoft Excel)
4. **“contig_low.csv”** –List of nucleotides with low score/confidence (open via Microsoft Excel)
5. **“Reads.fastq.gz”** – fastq raw data file
6. **“Sample_status.txt”** – Data statistics and barcode number

Data Example: QC Plasmid

Sample: 5 µl of purified MGIN plasmid DNA

- **OD 260/280 Ratio:** 1.81
- **Concentration:** 100 ng/µl
- **Predicted Size:** 7262 bp

Results Example:

- **Page 2:** PDF Report
- **Page 3:** contig.fas file
- **Page 4:** Whole sequence

PlasmidExpress

Whole Plasmid Sequencing – Results Example

PlasmidExpress Report: MIGN

QuintaraBio 2023-03-17
[PlasmidExpress](#)

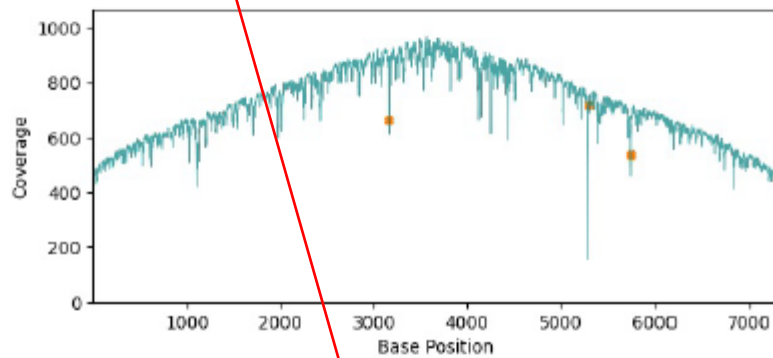
Name	Reads	Bases
Total	1304	7257754
Host Genomic DNA	0.23%	0.14%

Assembly Status: form 1 contig

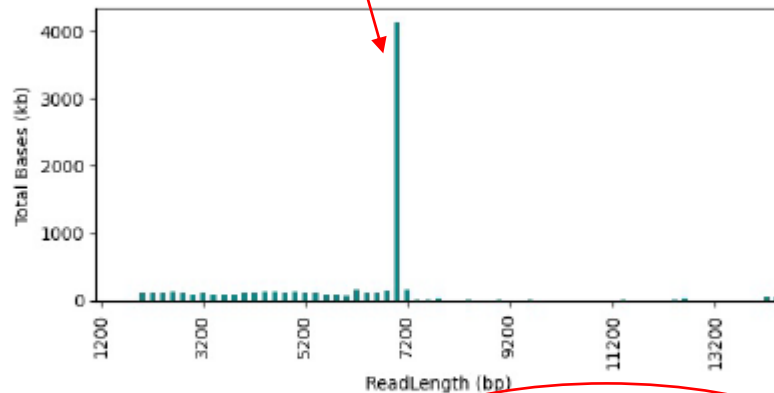
Contig	Length (bp)	Read Count	Bases Mapped
MIGN_contig	7262	1291	7197951 (99.18%)

MIGN_contig Coverage Map

low confidence base positions are marked with x



Read Length Distribution



Files Included

- read fastq file
- contig fasta
- base information for each contig position
- low confidence bases for each contig

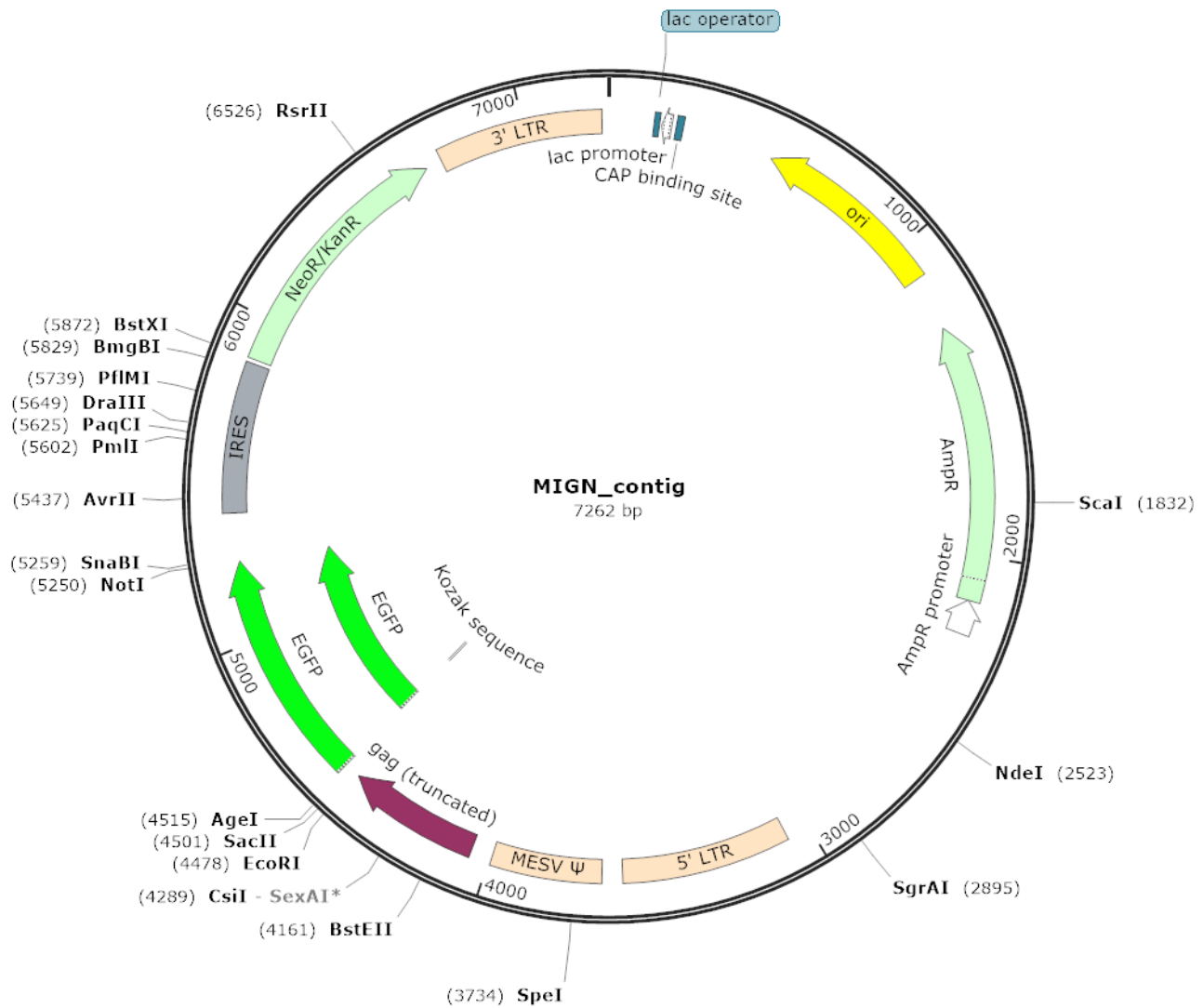
Good Data Indicators

- number of reads ≥ 500
- read length peaks at expected plasmid size
- all reads form 1 contig only
- more than 90% bases mapped back to contig sequence

PlasmidExpress

Whole Plasmid Sequencing – Results Example

MIGN_contig.fas (Opened via SnapGene Viewer)



PlasmidExpress

Whole Plasmid Sequencing – Results Example

MGIN_contig.fas - 7262 bp (exported from SnapGene Viewer)

TGGAGAACAACATCTTGGAGGTAGGAGTCCAATATTAAGTAATCCTGACTCAATTAGCCACTGTTTTGAATCCACATACTCCAATCTCTGAAATAGTTCATTATGGACAGCGCAGAA
AGAGCTGGGGAGAAATGTGAAATTTGTTATCCGCTCACAATTCACACACACATACGAGCGGAAGCAATAAAGTGTAAAGCCTGGGGTGCCTAATGAGTGAAGTAACTCACATTAATTTGCG
TTGCGCTCACTCCCGCTTTCCAGTCCGGAAACCTGTCTGCCAGTGCATTAATGAATCCGGCAACCGCGGGGAGAGCGGTTTTCGCTATTTGGGCGCTCTCCGCTTCTCTCGCTCAC
TGACTCCGCTCGCTCGGTCGCTCCGCTGCGCGGAGCGGTATCAGCTCACTCAAAGGCGGTATACGCTTATCCAGAAATCAGGGGATAACCCAGGAAAGAACATGTGAGCAAAAGGCC
AGCAAAAGGCCAGGAAACCGTAAAAGGCCGCGTGTCTGGCCTTTTCCATAGGCTCCGCCCTGAGCAGGATCACAAAATCGACGCTCAAGTCAAGGTTGGCGAAACCCGACAGGA
CTATAAAGATACCAGGCGTTTCCCGCTGGAAGCTCCCTCGTGGCCTCTCTGTTCCGACCCTGCGCGTTACCGGATACCTGTCCGCTTTTCCCTTCCGGGAAGCGTGGCGCTTTCTCA
TAGCTCACGCTGAGGTATCTCAGTTCGGTGTAGGTGCTTCCGCTCCAAGCTGGGCTGTGTGCACGAACCCCGCTCAGCCCGACCGCTGCGCCTTATCCGCTAACATCGTCTTGGT
CCAAACCGGTAAAGACAGACTTATCCGCCACTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGATGGCGGTGTACAGAGTCTTGAAGTGGTGGCTAACTACGGCTAC
ACTAGAAGAAGACAGTATTTGGTATCTGCGCTCTGCTGAAGCAGTACCTCGGAAAAGAGTTGGTAGCTCTTATCCGGCAAAACAAACCCGCTGGTAGCGGTTTTTTTTGTTTTG
CAAGCAGCAATTAACCGCGCAAAAAGGATCTCAAGAAATCCTTTGATCTTTCTACCGGGTCTGACGCTCAGTGGAAACGAAACTCAGTTAAGGATTTTGGTCAATGAGATTG
CAAAAAGGATCTTACCTAGATCTTTTAAATTAATAAATGAAGTTTTAAATCAATCTAAAGTATATATGAGTAAACTTGGTCTGACAGTTACCAATGCTTAATCAGTGAAGCACCATC
TCAGCATCTGTCTATTTCGTTTCCATAGTTGCTGACTCCCGCTGCTGATAGATAACTACGATACGGGAGGGCTTACCATCTGGCCCGAGTGTGCAATGATACCCGCGAGACCACG
CTCACCGGCTCCAGATTTATCAGCAATAAACCGCAGCCGGAAGGGCCGAGCGCAGAAAGTGGTCTGCACTTTACCGCTCCATCCAGTCTATTAATTTGTTCCCGGGAAGCTAGAG
TAAGTAGTTCCCGAGTTAATAGTTTTGCGCAACGTTGTTGCCATTGCTACAGGCATCGTGGTGTACCGCTCGTCCGTTTGGTATGGCTTCAATCAGCTCCGTTCCCAACGATCAAGCGA
GTTACATGATCCCGCATGTTGTGCAAAAAGCGGTTAGCTCCTTCGGTCTCCGATCGTGTGCAGAAAGTAAAGTGGCCGAGTGTATCACTCATGGTTATGGCAGCAGTGCATAATTC
TCTTACTGTCTGCTCCGTAAGATGCTTTTCTGTGACTGGTGAAGTACTCAACCAAGTCACTTGTGAAATAGTGTATGCGGCGACCGAGTGTCTTCCCGCGCTCAATACGGGATA
ATACCGCGCCACATAGCAGAACTTTAAAAGTGTCTCATCATTGGAACACGTTCTTCGGGGCGAAACTCTCAAGGATCTTACCCTGTGTAGATCCAGTTGATGTAACCCACTCGTGCA
CCCACTGATCTTCCAGCATCTTTACTTTTACCAGCGTTTCTGGGTGAGCAAAAACAGGAAGGCAAAATGCCGCAAAAAGGGAATAAGGGCGACAGGAAATGTTGAATCTCATACT
CTTCTTTTTCAATATTTAAGCAATTTATCAGGGTTATTTGCTCATGAGCGGATACATATTTGAATGATTTAGAAAAATAAACAATAAGGGTTCCCGCGCACATTTCCCGAAAAAG
TGCCACTGAGCTTAAGAAACCATTTATTCATGACATTAACCTATAAAAAATGAGGCTATCACGAGGCCCTTTCGCTCCGCGCTTTCGGTGTGACCGGTGAAACCTCTGACATG
CAGCTCCCGGAGACGGTACAGCTTGTCTGTAAGCGGATGCGGGGAGCAGACAAGCCCGTCAAGGCGGCTCAGCGGGTGTGGCGGGTGTGGGGCTGGCTTAACTATGCGGCATCAGA
GCAGATTGACTGAGAGTGCACCATATGCGGTGTGAAATACCGCACAGATGCGTAAGGAGAAAAATACCGCATCAGGCGCCATTCGCCATTCAGGCTGCGCAACTGTTGGGAAGGGCGAT
CGGTGCGGGCCTCTTCGCTATTACGCCAGTGGCGAAAGGGGGATGTGCTGCAAGGCGATTAAGTTGGGTAAACCGCGGGTTTTCCAGTCAAGCGTTGTAACACGACGGCGCAAGGA
ATGGTGCATGCAAGGATGGCGCCAAACAGTCCCGCGCCAGCGGGCTGCCACTATCCCAAGGCAAAACGCGCTCATGAGCCCGAAGTGGCGAGCCCGATCTTCCCATCGGTG
ATGTCGGCGATATAGGGCCAGCAACCGCACTGTGGCGCGGTGATGCCGGCCAGATGGTCCGGGTAGAGGCGATTAGTCCAATTTGTTAAAGACAGGATATCAGTGGTCCAGGC
TCTAGTTTTGACTCAACAATATCACCAGCTGAAGCCTATAGAGTACGAGCCATAGATAAAAAATAAAGATTTTTATTTAGTCTCCGAAAAAGGGGGGAATGAAAGACCCCACTGTAGGT
TTGGCAAGCTAGCTTAAGTAACGCCAATTTTGAAGGCATGGAAATACATAAATCAGTGAATAGAGAAGTTTCAGATCAAGGTTAGGAACAGAGAGACAGAAATGGGCAACAGGAT
ATCTGTGGTAAGCAGTTCTTCCCGGCTCAGGGCCAAAGACAGATGGTCCCGATGCGGTCCCGCTCAGCAGTTTCTAGAGAACCATCAGATGTTTCCAGGGTGGCCCAAGGACC
TGAATGACCTTGGCTTATTTGAACTAACCAATCAGTTCTCGTCTCTGTTTCCGCGCTTCTGCTCCCGGATCAATAAAGAGCCCAACCCCTCACTCGCGCGCCAGCT
CCTCCGATAGCTGCTGCGCCCGGATTTCCCAATAAAGGCTTTGCTGTTTTGCTCCGAACTGCTGGATCGTCTGATCCTTGGAGGGTCTCTCCAGGCTGATGTTGCGGCTGACCA
CCTCGGGGGTCTTTCAATTTGGAGGTTCCACCAGATTTGGAGACCCCTGCCAGGACCACCGACCCCGCGGGGAGGTAAGCTGGCCAGCGGTGCTTTCGTGTCTGTCTGTCTT
TGTGCGTATTGTCGGCGCATCTAATGTTTGGCGCTGCGTCTGACTAGTTAGTAACTAGCTCTGATCTGGCGGACCCGTTGGTGAACACTGACAGTTCTGAACACCCGCGCCAGCC
CTGGGAGAGCTCCAGGGACTTTGGGGCGGTTTTTGTGGCCGACTGAGGAAGGGGATCGATGTGAAATCCGACCCCGTCAAGATATGTTGGTCTGGTAGGAGACGAGAACCTAAAA
CAGTTCCCGCTCCGTTGAATTTTTGCTTTTCGTTTTGGAACCCGAGCCGCGCTTGTCTGCTGAGCGCTGAGCATCGTTCTGTGTTGCTCTGCTGCTGCTGTTTCTGTTATTT
GTCTGAAAAATAGGGCCAGACTGTTACCACCTCCCTTAAAGTTGACCTTAGGTCAGTGGAAAGATGTCGAGCGGATCGCTCACAAACAGTCCGTTAGATGTCAAGAAAGAGCGTTGGGTTA
CCTTCTGCTCTGCAAGATGGCCAACTTTAACGTCGGATGGCCGCGAGACGGCACCTTTAACCGAGACCTCATACCCAGGTTAAGATCAAGGTTCTTCCACTGGCCCGCATGGACAC
CCAGACAGTCCCTACCTCAGTCCGATGGGAAAGCTTGGCTTTTGAACCCCTCCCTGGTCAAGCCCTTTGTACACCCTAAGCCTCCGCTCCCTTCCCTCCATCCGCGCGCTCTCT
CCCCCTTGAACCTCCTCGTTCGACCCCGCTCGATCTCCCTTTATCCAGCCCTCACTCTTCTTAGGCGCCGGAATCTGCAGTTCGACGGTACCGGGGCGGGGATCCACCGGTG
CCACTTGGTGGCAGGGCGAGGAGCTGTTACCCGGGGTGGTCCCATCTGTTCTGAGCTGGACGGCGGACGTAACAGGCCACAAGTTCAAGCTGTCGCGGAGGGCGAGGGCATGGCC
ACCTACGGCAAGCTGAAAGTTCACTGCAACCCGGAAGCTGCCGTCGCTGGCCACCCCTGTCGACACCCTGACCTACGGCTGTCAGTGGTTCAGCCGCTACCCCGACCA
CATGAAGCAGCAGACTTCTTCAAGTCCGCCATGCCGAAGGCTACGTCAGGAGCGCACCATCTTCTTCAAGGACAGCGGCAACTACAAGACCCGCGCGAGGTGAAGTTCGAGGGCG
ACACCTTGGTGAACCGCATCGAGCTGAAGGCATCGACTTCAAGGAGGACGGCAACATCTTGGGCAACAAGCTGGAGTACAACACAGCCACAACGCTTATATCATGGCCGACAAG
CAGAAGAACGGCATCAAGGTGAACCTCAAGATCCGCCACAACATCGAGGACGGCAGCTGCAGCTCGCCGACCACTACAGCAGAACACCCCATCGCGCAGCCCGCTGCTGTCTG
CGACAACCACTACCTGAGCACCAGTCCGCTGAGCAAAAGACCCCAACGAGAAGCGGATCATGATGTTCTGTTGAGTTCTGACCCGCGGGGATCACTCTCGGCATGGACGAGC
TGTACAAGTAAAGCGGCGCTACGTAGTFCAGATGCAGGAATTAATTCGCGCCCCCCCCCCCCCCCCCTAACGTTACTGGCCGAAGCGGTTGGAATTAAGCGCGGTGTGCGTTTGT
TATATGTTATTTCCACCATATGCGCTCTTTTGGCAATGTGAGGGCCGGAACCTGGCCCTGTCTTCTGACGAGCATCTCAGGGGCTTTTCCCTCTCGCCAAAGGAATGCAAG
TCTGTTGAAAGTGTGGAAGGATCGATGAAAGCTTCTTGAAGCAAAACAACCTGTGAGGCAACCTTTGACGACCCCTTTGCAAGCAGCGGAACCCCACTGGCGACAGTGCCTCTCGGGCC
AAAAGCCAGTGTATAAGATACCTGCAAAAGCGGCACAACCCAGTGCACGTTGTGAGTTGGATAGTTTGGAAAGAGTCAATGGCTCTCTCAAGCGTATTTCAACAAGGGGCTG
AAGGATGCCCAGAAGTACCCATTTGATGGGATCTGATCTGGGGCTCCGTTGCATGCTTTACATGTTTGTAGTTCGAGGTTAAAAAAGCTTACGGCCCCGAAACCCAGGGGACGT
GGTTTTCCCTTGAAAAACAGATGATAAGCTTGGCCACAACCATGGGATCGGCTGCACTTGGCAAGGATGTCAGCCAGGTTTCCGCGCGCTTGGGTGGAGAGGCTATTTCGGTATGAC
TGGGCACAACAGACAATCGCTGCTGATGCCGCGTGTCCGGCTGTGAGCGCAGGGGCGCCGGTCTTTTTTGTCAAGACCGACTGTCCGGTGCCTGAATGAATGCAGGACGA
GGACGCGGGCTATCGTGGCTGGCCACGACGGCGTTCCTTGGCGAGTGTGCTCGAGTGTCTACTGAAGCGGAAGGACTGGCTGCTATTTGGCGAAGTGGCGGGGAGGATCTCC
TGTCTATCTACCTTGTCTCCGAGAAAGTATCCATCATGGCTGATGCAATCGGGCGGCTGCATACGCTTGTATCCGGCTACCTGCCATTCGACACCAAGCAACATCGCATCGAG
CGAGCAGTACTCCGATGGAAAGCTTGTTCGATCAGGATGATCTGGAAGAGAGCATCAGGGGCTCGCGCCAGCCGAACTGTTCCGCAAGCTGTTCCGCAAGCTGTTCCGCAAGCTTTGCAA
GGATCTCGTGTGACCATGGCGATGCTGCTGCGCAATATCATGGTGGAAATGGCCGCTTTTCTGGATTATCGACTGTGGCGGCTGGGTGTGGCGGACCGCTATCAGGACATAG
CGTTGGTACCCGTGATTTGCTGAAGAGCTTGGCGCGAATGGGCTGACCGCTTCTCGTGTCTTACGGTATCCGCGCTCCCGATTCGACAGCGCATCGCTTCTATCGCTTCTGTGAC
GAGTTCTTGGGGGATCCGATAAAAATAAAGATTTTATTTAGTCTCCAGAAAAAGGGGGGAATGAAAGACCCCACTGTAGGTTTGGCAAGCTAGCTTAAGTAACGCCATTTTGC
GGCATGGAATAACATAACTGAGAATAGAGAAGTTCAGATCAAGGTTAGGAACAGAGAGACAGCAGAATATGGCCAAACAGGATATCTGTGGTAAGCAGTTCTTCCCGGCTCAGGG
CCAGAACAGATGGTCCCGAGTCCGCTCCCGCTCAGCAGTTTCTAGAGAACCATCAGATGTTTCCAGGTTGCCCAAGGACTGAAATGACCTGTGCTTATTTGAACATAACCA
TCAGTTCGCTTCTGCTGTTGTTGCGCGCTTCTGCTCCCGAGCTCAATAAAGAGCCCAACACCTCCTCAGCGCGCAGTCTCCCGATAGCTAGCTGCGTCCGCGGATCCCGGT
ATCCAATAAACCCCTTTCAGTTGCATCCGACTTGTGGTCTCGCTGTTCTTGGGAGGGTCTCTCTGAGTATTGACTACCCGTCAGCGGGGCTTTTCAAGGTAACAGTTCTTTGA