

# ERGA Assembly Report

v24.10.15

Tags: ERGA-BGE

TxID	2057147
ToLID	<b>kaBotIsra2</b>
Species	Botrylloides israeliense
Class	Ascidacea
Order	Stolidobranchia

Genome Traits	Expected	Observed
Haploid size (bp)	335,130,659	746,408,380
Haploid Number	16 (source: ancestor)	16
Ploidy	2 (source: ancestor)	2
Sample Sex	Hermaphrodite	unknown

## EBP metrics summary and curation notes

Obtained EBP quality metric for hap1: 7.7.Q52

The following metrics were automatically flagged as below EBP recommended standards or different from expected:

- . Observed Haploid size (bp) has >20% difference with Expected
- . Observed sex is different from Sample sex
- . Kmer completeness value is less than 90 for hap1
- . Not 90% of assembly in chromosomes for hap1

### Curator notes

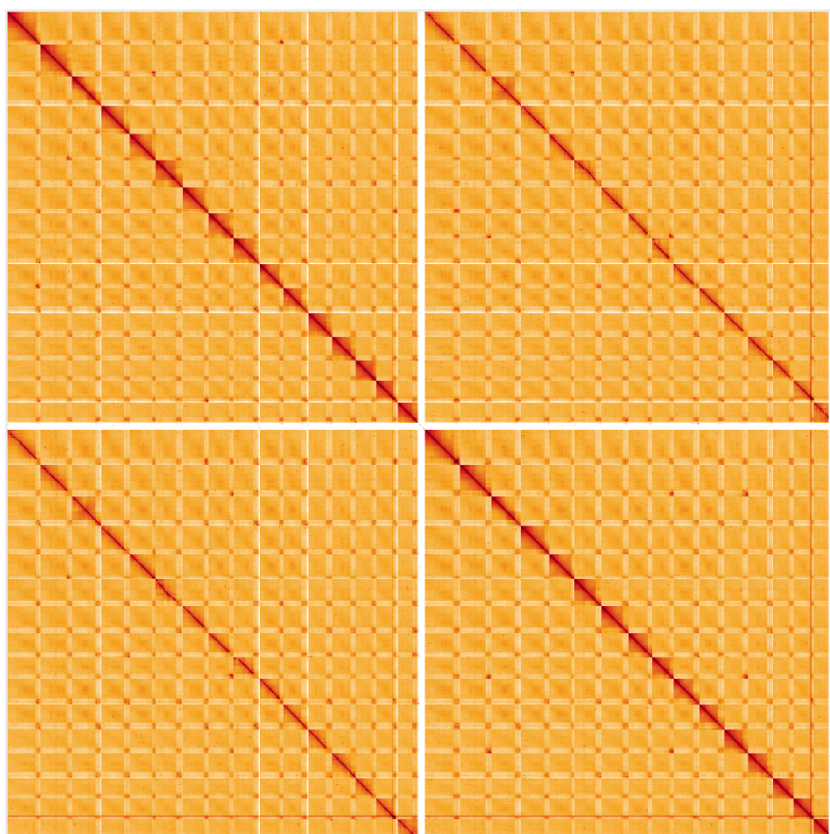
- . Interventions/Gb: None
- . Contamination notes: "None"
- . Other observations: "Yahs failed to make any meaningful joins, so scaffolding was done manually after purge-dups. 60 sequences were removed that fcs-gx tagged as proteobacteria totalling 2Mb."

# Quality metrics table

Metrics	Pre-curation hap1	Curated hap1
Total bp	376,304,086	746,408,380
GC %	39.6	39.56
Gaps/Gbp	0	33.49
Total gap bp	0	2,500
Scaffolds	242	315
Scaffold N50	22,502,874	22,918,972
Scaffold L50	8	15
Scaffold L90	16	29
Contigs	242	340
Contig N50	22,502,874	21,455,131
Contig L50	8	16
Contig L90	16	34
QV	58.6778	52.0836
Kmer compl.	69.06	68.4764
BUSCO sing.	92.7%	92.4%
BUSCO dupl.	3.6%	4.0%
BUSCO frag.	1.5%	1.5%
BUSCO miss.	2.2%	2.1%

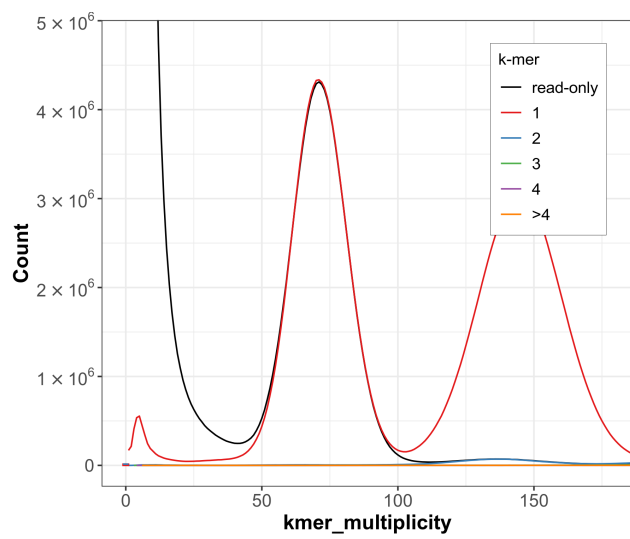
BUSCO: 6.0.0 (euk\_genome\_min, miniprot) / Lineage: metazoa\_odb12 (genomes:206, BUSCOs:672)

# HiC contact map of curated assembly



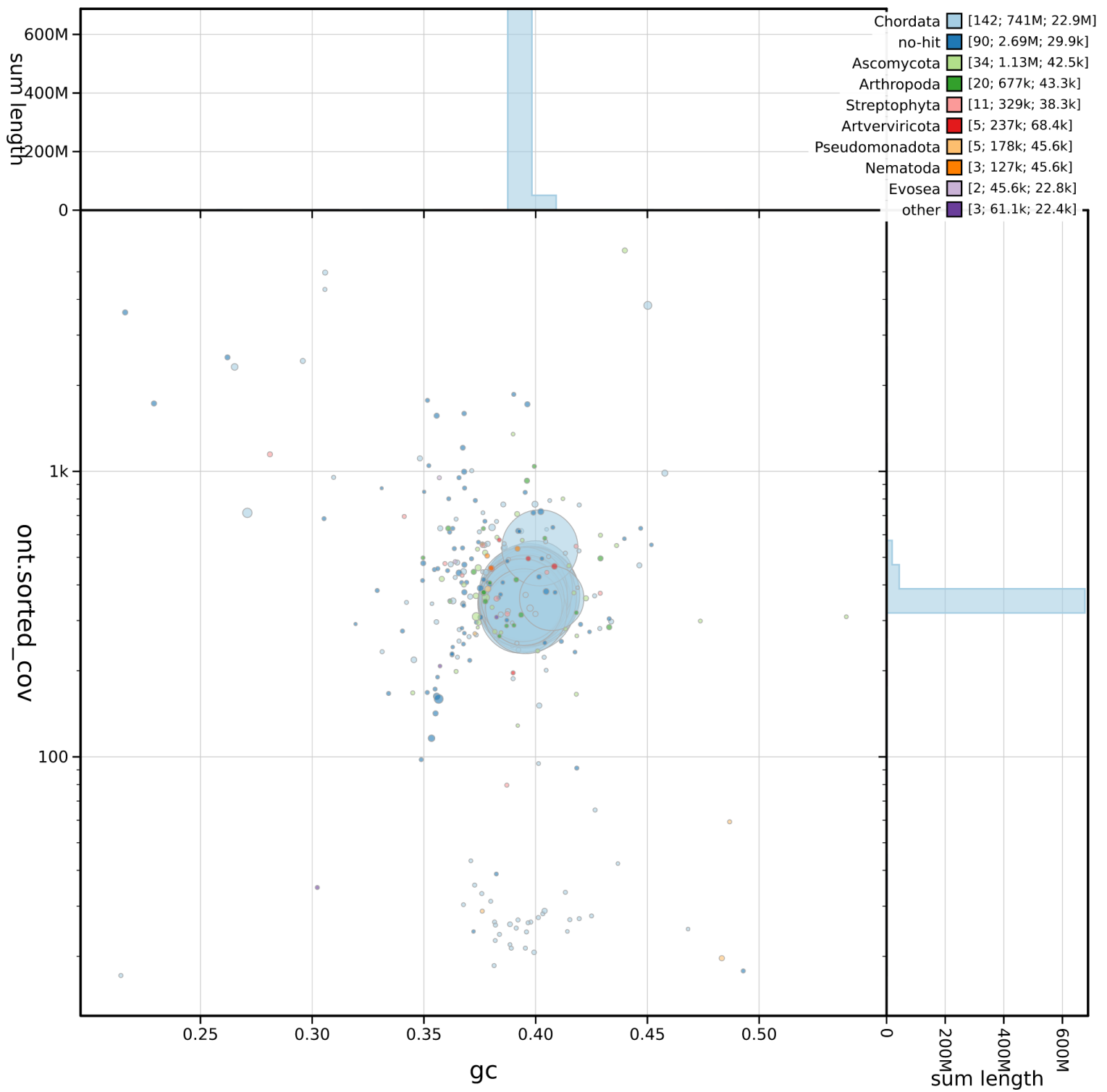
hap1 [\[LINK\]](#)

# K-mer spectra of curated assembly



Distribution of k-mer counts per copy numbers found in asm

# Post-curation contamination screening



**hap1.** Bubble plot circles are scaled by sequence length, positioned by coverage and GC proportion, and coloured by taxonomy. Histograms show total assembly length distribution on each axis.

# Data profile

Data	ONT	HiC
Coverage	292	71

# Assembly pipeline

- **HiFiasm**
  - |\_ *ver*: 0.25.0
  - |\_ *key param*: --h1
  - |\_ *key param*: --h2
  - |\_ *key param*: -l3
  - |\_ *key param*: --ont
- **purge-dups**
  - |\_ *ver*: 1.2.6
  - |\_ *key param*: NA
- **fcs-gx**
  - |\_ *ver*: 0.5.4
  - |\_ *key param*: NA

# Curation pipeline

- **PretextView**
  - |\_ *ver*: 1.0
  - |\_ *key param*: NA

Submitter: Tom Brown

Affiliation: IZW

Date and time: 2026-02-10 14:16:38 CET