### ERGA Assembly Report

v24.09.10

Tags: ERGA-BGE

TxID	10034		
ToLID	mCriCri2		
Species	Cricetus cricetus		
Class	Mammalia		
Order	Rodentia		

Genome Traits	Expected	Observed	
Haploid size (bp)	3,273,505,721	2,520,161,827	
Haploid Number	11 (source: direct)	11	
Ploidy	2 (source: ancestor)	2	
Sample Sex	ple Sex XY		

#### EBP metrics summary and curation notes

Obtained EBP quality metric for collapsed: 7.8.Q54

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

. Observed Haploid size (bp) has >20% difference with Expected

#### Curator notes

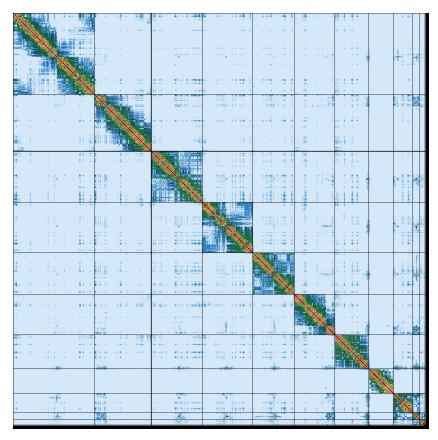
- . Interventions/Gb: 6 . Contamination notes: "No contaminants detected in the Nextdenovo assembly selected for curation."
- . Other observations: "Curation made 1 cut in a contig, 4 breaks at gaps and 9 joins. SUPER\_Y sequence accounts for 5,195,203 bp. Despite of searching thoroughly for Y sequence in the purged haplotigs removed from our assemblies we did not found enough to scaffold the male Y chromosome. Mitogenome was not successfully assembled."

# Quality metrics table

Metrics	Pre-curation collapsed	Curated collapsed	
Total bp	2,520,160,827	2,520,161,827	
GC %	41.46	41.46	
Gaps/Gbp	49.2	51.19	
Total gap bp	24,800	25,800	
Scaffolds	54	49	
Scaffold N50	250,072,296	305,542,590	
Scaffold L50	5	4	
Scaffold L90	9	8	
Contigs	178	178	
Contig N50	47,690,202	47,690,202	
Contig L50	17	17	
Contig L90	55	55	
QV	54.4254	54.4254	
Kmer compl.	94.0784	94.0784	
BUSCO sing.	95.3%	97.7%	
BUSCO dupl.	2.8% 1.2%		
BUSCO frag.	0.7%	0.2%	
BUSCO miss.	1.2%	0.9%	

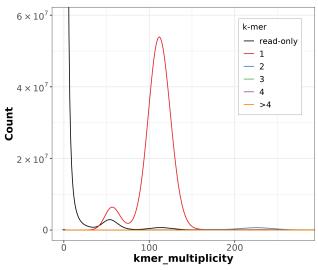
 $\hbox{Warning: $\tt BUSCO$ versions or lineage datasets are not the same across results}$ 

HiC contact map of curated assembly

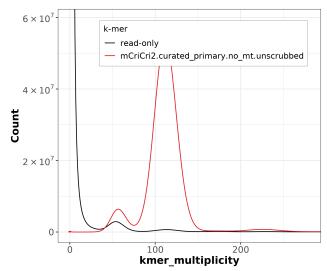


collapsed [LINK]

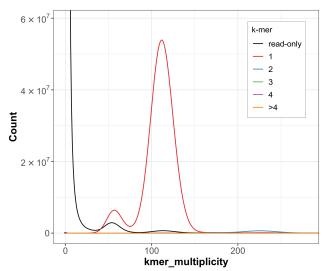
## K-mer spectra of curated assembly



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



Distribution of k-mer counts coloured by their presence in reads/assemblies



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

## Post-curation contamination screening

## Data profile

Data	ONT	Illumina	OmniC
Coverage	105x	84x	78x

## Assembly pipeline

```
- CLAWS pipeline
    _ ver: 2.2.0
   _ key param: NA
- FOAM pipeline
    |_ ver: 0.5
    |_ key param: NA
Trim_galore
    |_ ver: 0.6.7
    |_ key param: NA
- Filtlong
    |_ ver: 0.2.1
    | key param: NA
- flye
    |_ ver: 2.9.1
    _ key param: NA
- nextdenovo
    _ ver: 2.5.0
   |_ key param: NA
- hypo
   |_ ver: 1.0.3
    _ key param: NA
- purge_dups
    |_ ver: 1.2.6
    _ key param: NA
- YaHS
    |_ ver: 1.2a
    _ key param: NA
```

## Curation pipeline

Submitter: Fernando Cruz Affiliation: CNAG Barcelona Date and time: 2024-10-23 19:42:12 CEST