

# Report

	MP_helen_r10_1	MP_helen_r10_2	MP_helen_r10_3	MP_r10_1	MP_r10_2	MP_r10_3	r1_medaka_10_1	r1_medaka_10_2	r1_medaka_10_3	r2_medaka_10_1	r2_medaka_10_2	r2_medaka_10_3	racon_r1_r10_1	racon_r1_r10_2	racon_r1_r10_3	racon_r2_r10_1	racon_r2_r10_2	racon_r2_r10_3	raw_r10_1	raw_r10_2	raw_r10_3	
# contigs (>= 5000 bp)	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
# contigs (>= 10000 bp)	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
# contigs (>= 25000 bp)	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
# contigs (>= 50000 bp)	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Total length (>= 5000 bp)	24072144	24070716	24072083	24075954	24075406	24076499	24074829	24072142	24074875	24068354	24059914	24071745	24063908	24060798	24065303	24061249	24053400	24062516	24062559	24061175	24061500	
Total length (>= 10000 bp)	24072144	24070716	24072083	24075954	24075406	24076499	24074829	24072142	24074875	24068354	24059914	24071745	24063908	24060798	24065303	24061249	24053400	24062516	24062559	24061175	24061500	
Total length (>= 25000 bp)	24072144	24070716	24072083	24075954	24075406	24076499	24074829	24072142	24074875	24068354	24059914	24071745	24063908	24060798	24065303	24061249	24053400	24062516	24062559	24061175	24061500	
Total length (>= 50000 bp)	24072144	24070716	24072083	24075954	24075406	24076499	24074829	24072142	24074875	24068354	24059914	24071745	24063908	24060798	24065303	24061249	24053400	24062516	24062559	24061175	24061500	
# contigs	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Largest contig	4765293	4765903	4765296	4765362	4766035	4765940	4765290	4765413	4765355	4765312	4765387	4765372	4764581	4764920	4764661	4764695	4764766	4764706	4763429	4763874	4763424	
Total length	24072144	24070716	24072083	24075954	24075406	24076499	24074829	24072142	24074875	24068354	24059914	24071745	24063908	24060798	24065303	24061249	24053400	24062516	24062559	24061175	24061500	
Reference length	1805517	1805517	1805517	1805517	1805517	1805517	1805517	1805517	1805517	1805517	1805517	1805517	1805517	1805517	1805517	1805517	1805517	1805517	1805517	1805517	1805517	
GC (%)	44.81	44.80	44.81	44.80	44.80	44.80	44.80	44.80	44.80	44.80	44.80	44.80	44.80	44.79	44.79	44.79	44.78	44.79	44.77	44.77	44.77	
Reference GC (%)	52.72	52.72	52.72	52.72	52.72	52.72	52.72	52.72	52.72	52.72	52.72	52.72	52.72	52.72	52.72	52.72	52.72	52.72	52.72	52.72	52.72	
N50	4045616	4045633	4045623	4045594	4045600	4045599	4045600	4045603	4045599	4045597	4045604	4045600	4045299	4045286	4045284	4045354	4045343	4043031	4042943	4042477		
NG50	4765293	4765903	4765296	4765362	4766035	4765940	4765290	4765413	4765355	4765312	4765387	4765372	4764581	4764920	4764661	4764695	4764766	4764706	4763429	4763874	4763424	
N75	2845381	2845365	2845381	2845424	2845426	2845425	2845435	2845435	2845432	2845432	2845433	2845317	2845303	2845316	2845298	2845330	2845342	2843358	2843843	2843366		
NG75	4765293	4765903	4765296	4765362	4766035	4765940	4765290	4765413	4765355	4765312	4765387	4765372	4764581	4764920	4764661	4764695	4764766	4764706	4763429	4763874	4763424	
L50	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	
LG50	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
L75	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	
LG75	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
# misassemblies	75	73	75	74	74	74	74	76	74	74	82	75	74	76	74	77	83	79	76	75	76	
# misassembled contigs	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Misassembled contigs length	1947899	1945703	1947905	1948632	1947378	1948619	1948337	1945464	1948309	1942334	1933725	1945619	1938546	1934980	1939919	1935799	1927743	1936941	1947584	1945502	1947491	
# local misassemblies	12	14	13	11	11	11	23	29	18	27	25	25	45	43	42	34	39	33	28	29	28	
# scaffold gap ext. mis.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
# scaffold gap loc. mis.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
# unaligned mis. contigs	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	
# unaligned contigs	0 + 7 part	0 + 7 part	0 + 7 part	0 + 7 part	0 + 7 part	0 + 7 part	0 + 7 part	0 + 7 part	0 + 7 part	0 + 7 part	0 + 7 part	0 + 7 part	0 + 7 part	0 + 7 part	0 + 7 part	0 + 7 part	0 + 7 part	0 + 7 part	0 + 7 part	0 + 7 part	0 + 7 part	
Unaligned length	22079400	22080830	22079301	22082014	22083090	22082058	22083303	22085751	22082523	22083679	22085454	22083524	22080962	22080072	22079956	22079750	22078655	22079212	22108393	22106210	22104512	
Genome fraction (%)	99.934	99.858	99.934	99.943	99.943	99.943	99.926	99.928	99.934	99.922	99.870	99.886	99.908	99.913	99.902	99.901	99.815	99.845	99.869	99.861	99.867	
Duplication ratio	1.105	1.104	1.105	1.105	1.104	1.105	1.104	1.101	1.104	1.100	1.095	1.103	1.099	1.098	1.101	1.099	1.096	1.100	1.084	1.084	1.085	
# N's per 100 kbp	0.00	0.00	0.00	0.00	0																	

## Misassemblies report

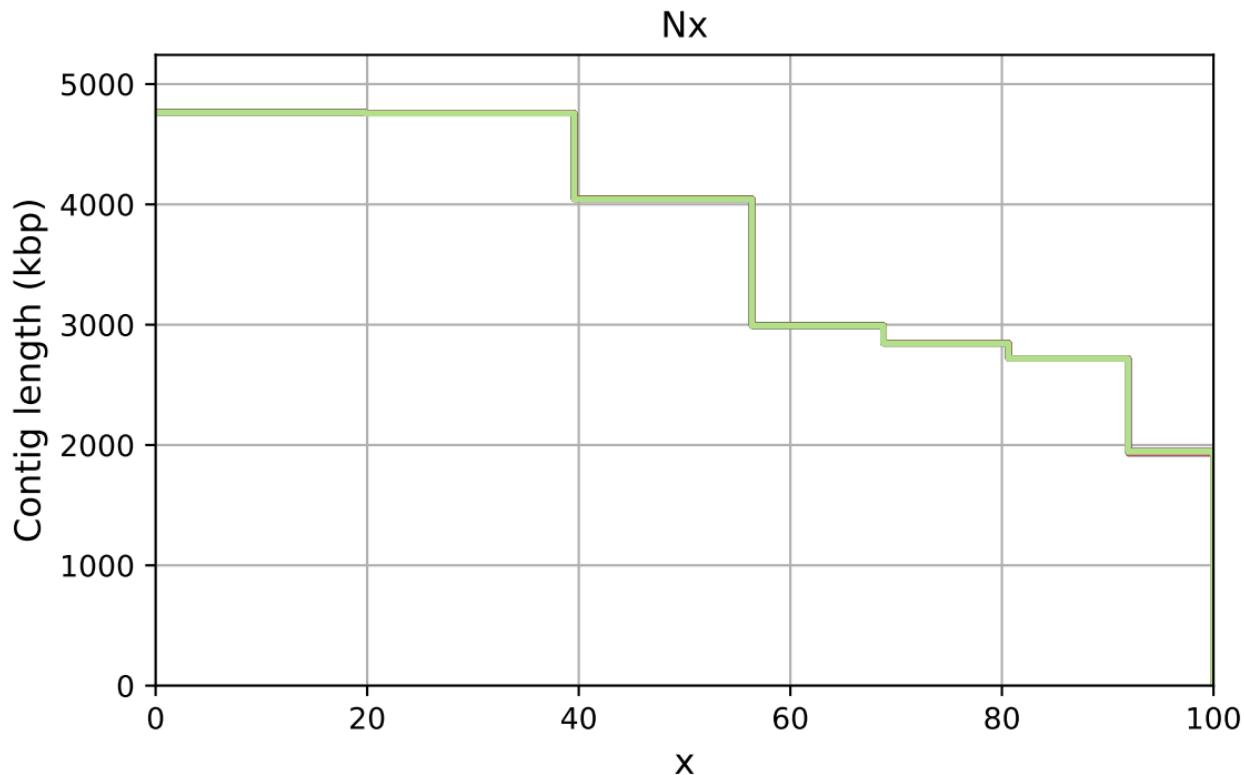
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# misassemblies	75	73	75	74	74	74	74	76	74	74	82	75	74	76	74	77	83	79	76	75	76
# contig misassemblies	75	73	75	74	74	74	74	76	74	74	82	75	74	76	74	77	83	79	76	75	76
# c. relocations	4	3	4	4	4	4	4	3	4	4	9	4	4	3	4	6	4	5	4	5	
# c. translocations	71	70	71	70	70	70	70	73	70	70	73	71	70	73	70	73	77	75	71	71	71
# c. inversions	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
# scaffold misassemblies	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
# s. relocations	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
# s. translocations	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
# s. inversions	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
# misassembled contigs	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Misassembled contigs length	1947899	1945703	1947905	1948632	1947378	1948619	1948337	1945464	1948309	1942334	1933725	1945619	1938546	1934980	1939919	1935799	1927743	1936941	1947584	1945502	1947491
# possibly misassembled contigs	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
# possible misassemblies	36	36	34	34	36	34	34	32	34	34	36	38	36	34	36	32	28	30	42	42	42
# local misassemblies	12	14	13	11	11	11	23	29	18	27	25	25	45	43	42	34	39	33	28	29	28
# scaffold gap ext. mis.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
# scaffold gap loc. mis.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
# misassemblies caused by fragmented reference	65	66	65	66	66	66	66	64	66	66	65	66	65	62	64	62	63	63	42	41	41
# unaligned mis. contigs	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
# mismatches	4756	4785	4761	4752	4831	4811	5556	5247	5506	5082	5057	5214	4808	4885	4881	4873	4857	4772	6710	6726	6904
# indels	215	190	218	218	212	209	267	244	256	217	189	193	1036	1027	1036	959	981	915	6383	6377	6396
# indels (<= 5 bp)	167	141	170	168	163	160	218	194	204	168	140	146	961	948	959	893	913	843	6294	6275	6302
# indels (> 5 bp)	48	49	48	50	49	49	49	50	52	49	49	47	75	79	77	66	68	72	89	102	94
Indels length	2577	2704	2580	2737	2729	2717	2712	2821	2772	2731	2726	2583	5127	5171	4952	4575	4544	5007	11288	11323	11364

All statistics are based on contigs of size  $\geq 5000$  bp, unless otherwise noted  
(e.g., "# contigs ( $\geq 0$  bp)" and "Total length ( $\geq 0$  bp)" include all contigs).

## Unaligned report

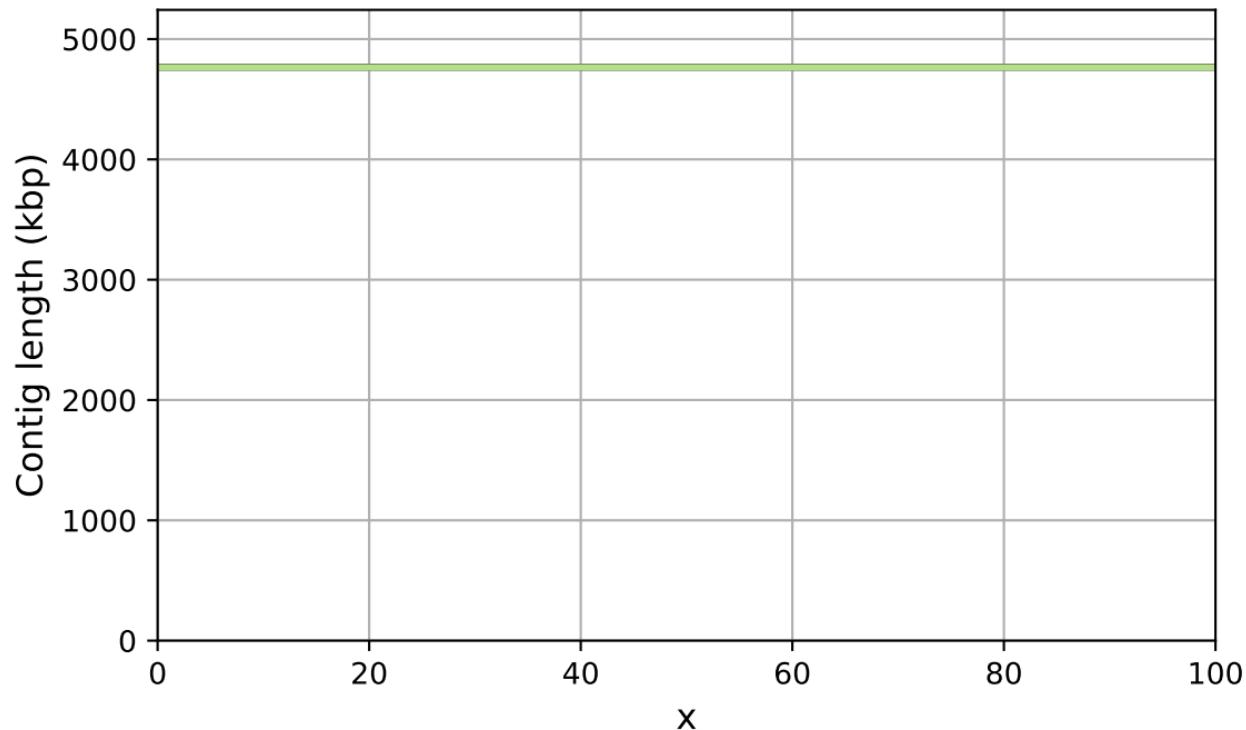
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# fully unaligned contigs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Fully unaligned length	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
# partially unaligned contigs	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	
Partially unaligned length	22079400	22080830	22079301	22082014	22083090	22082058	22083303	22085751	22082523	22083679	22085454	22083524	22080962	22080072	22079956	22079750	22078655	22079212	22108393	22106210	22104512
# N's	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

All statistics are based on contigs of size  $\geq 5000$  bp, unless otherwise noted  
(e.g., "# contigs ( $\geq 0$  bp)" and "Total length ( $\geq 0$  bp)" include all contigs).



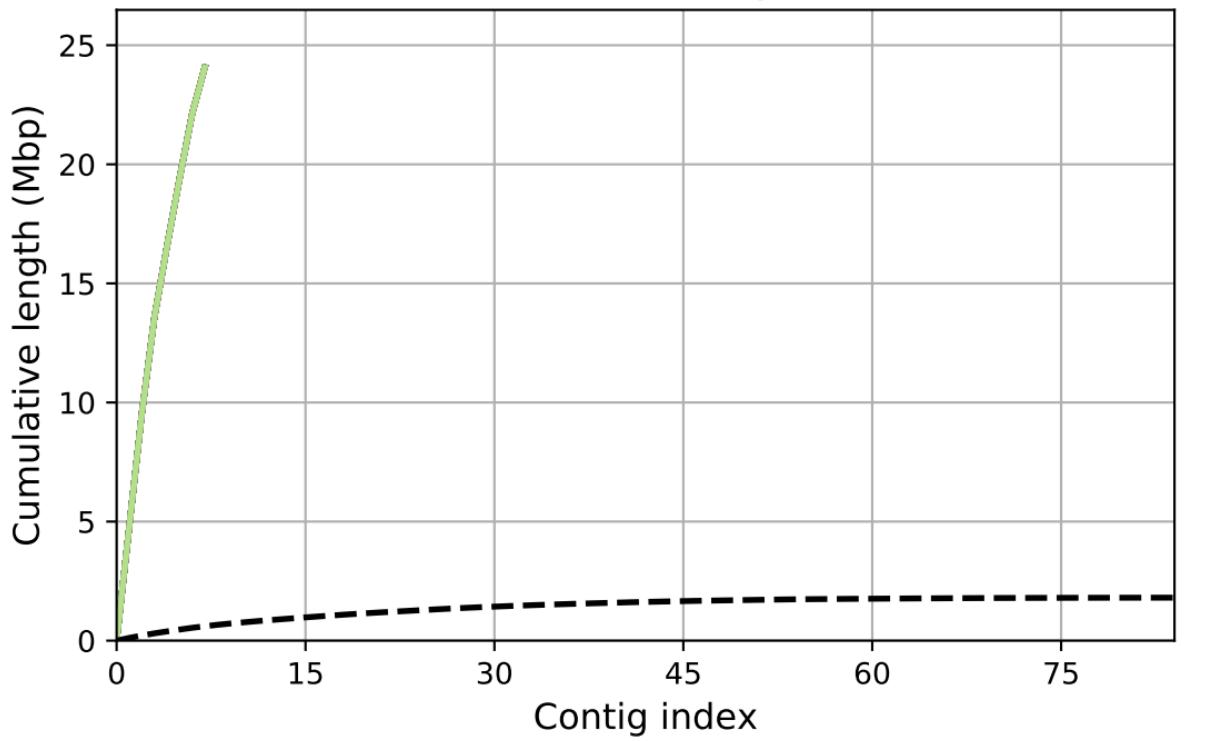
- MP\_helen\_r10\_1
- MP\_helen\_r10\_2
- MP\_helen\_r10\_3
- MP\_r10\_1
- r1\_medaka\_r10\_2
- r1\_medaka\_r10\_3
- r2\_medaka\_r10\_1
- r2\_medaka\_r10\_2
- racon\_r1\_r10\_3
- racon\_r2\_r10\_1
- racon\_r2\_r10\_2
- racon\_r2\_r10\_3

NGx



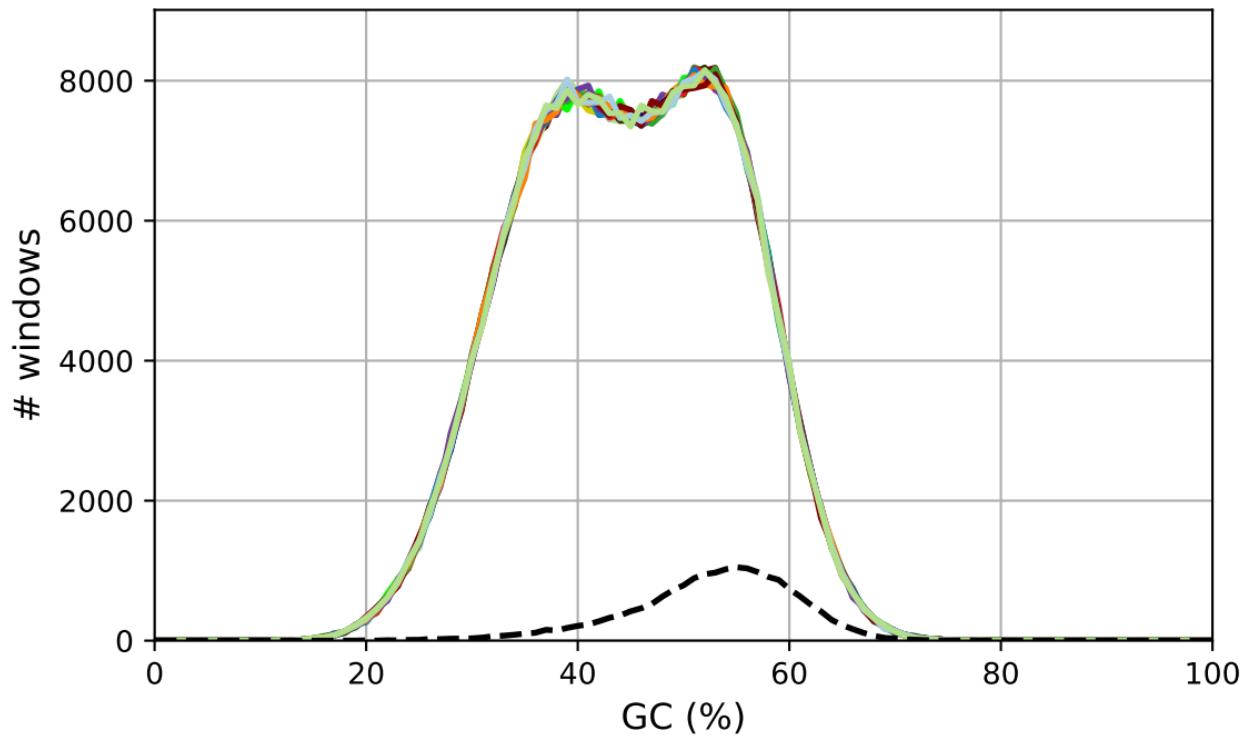
- |                |                 |                |
|----------------|-----------------|----------------|
| MP_helen_r10_1 | r1_medaka_r10_2 | racon_r1_r10_3 |
| MP_helen_r10_2 | r1_medaka_r10_3 | racon_r2_r10_1 |
| MP_helen_r10_3 | r2_medaka_r10_1 | racon_r2_r10_2 |
| MP_r10_1       | r2_medaka_r10_2 | racon_r2_r10_3 |

Cumulative length



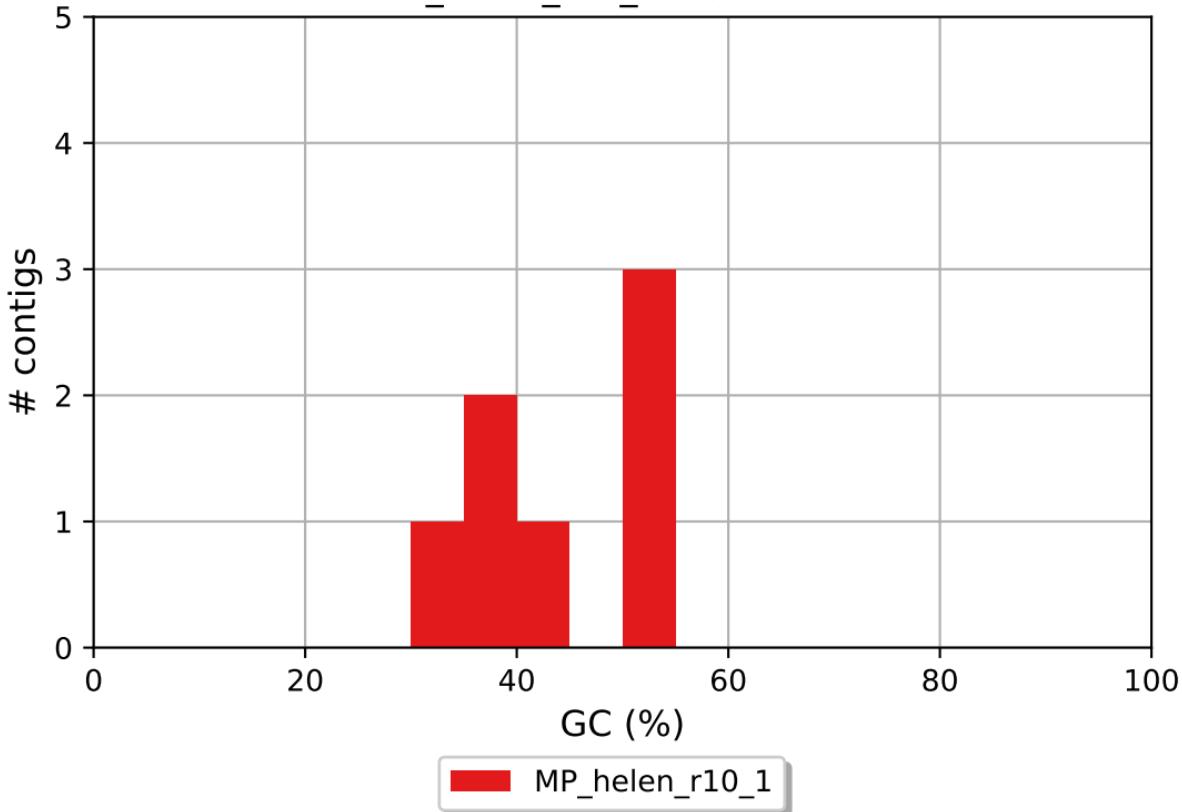
- MP\_helen\_r10\_1
- MP\_helen\_r10\_2
- MP\_helen\_r10\_3
- MP\_r10\_1
- r1\_medaka\_r10\_3
- r2\_medaka\_r10\_1
- r2\_medaka\_r10\_2
- r2\_medaka\_r10\_3
- racon\_r2\_r10\_1
- racon\_r2\_r10\_2
- racon\_r2\_r10\_3
- raw\_r10\_1

## GC content

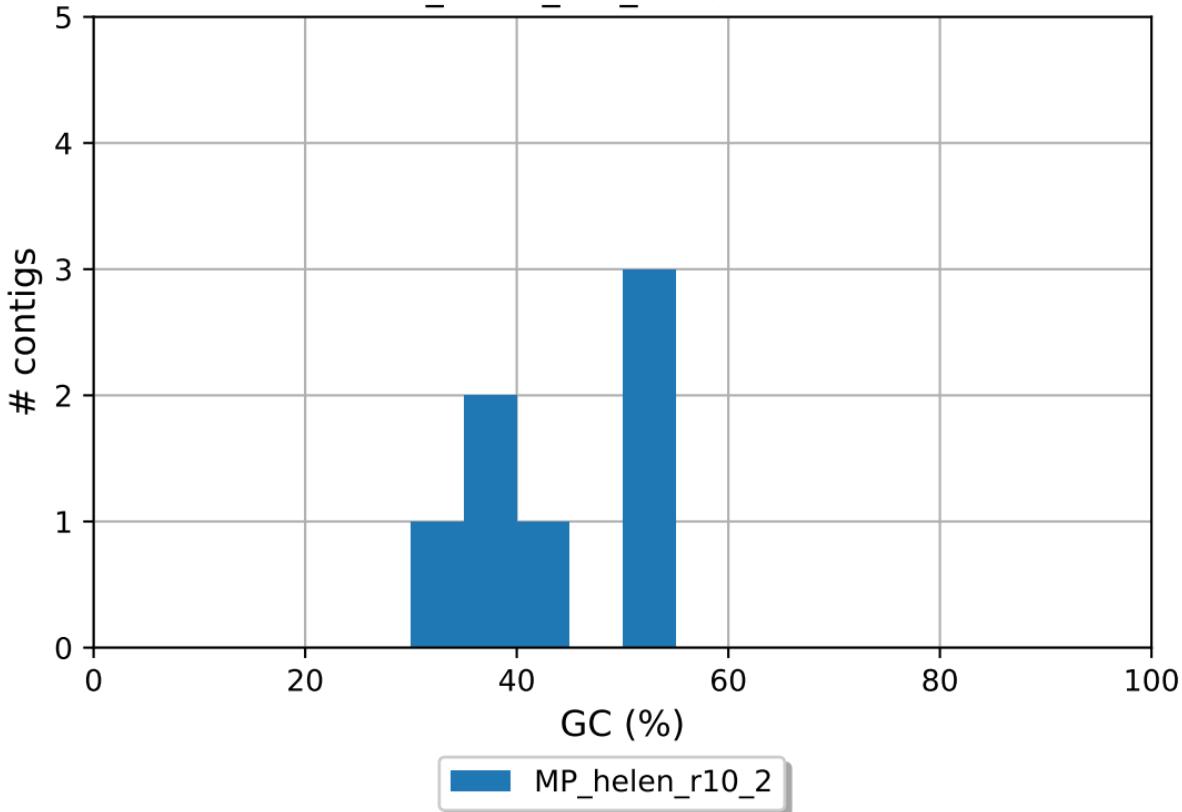


- |                |                 |                |
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| MP_helen_r10_2 | r2_medaka_r10_1 | racon_r2_r10_2 |
| MP_helen_r10_3 | r2_medaka_r10_2 | racon_r2_r10_3 |
| MP_r10_1       | r2_medaka_r10_3 | raw_r10_1      |

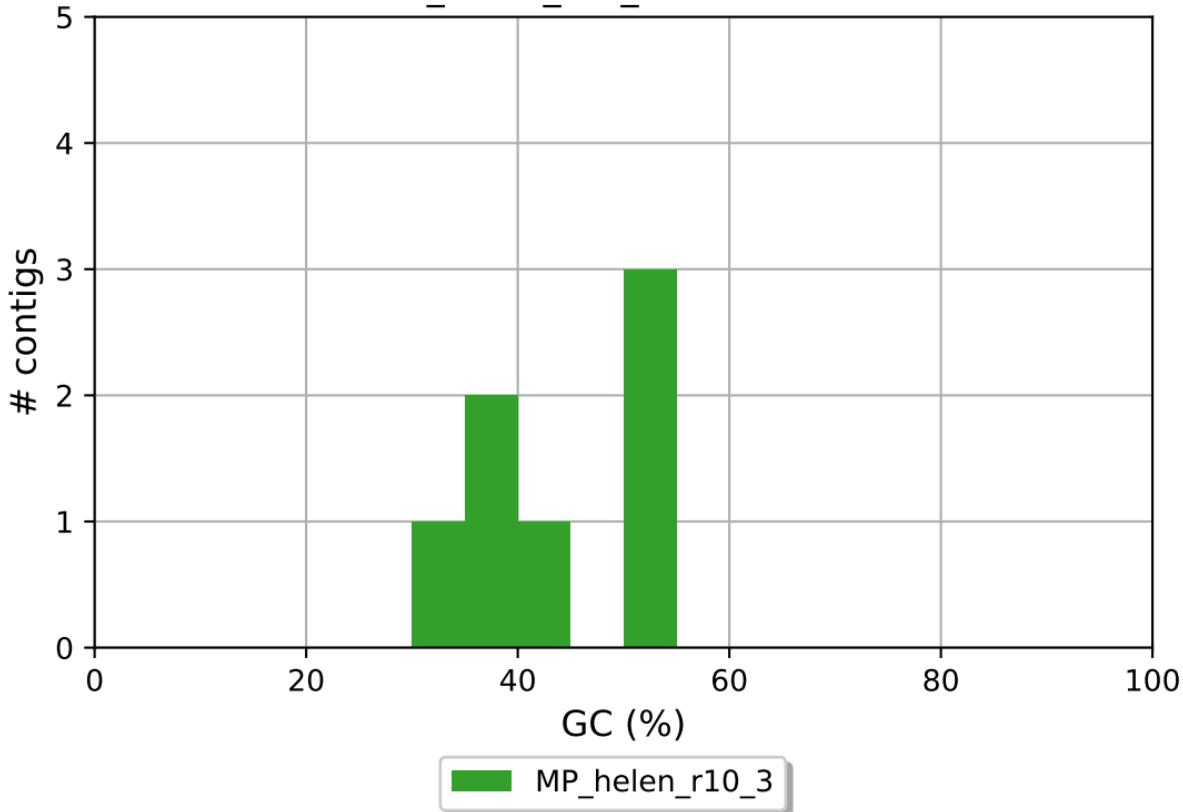
MP\_helen\_r10\_1 GC content



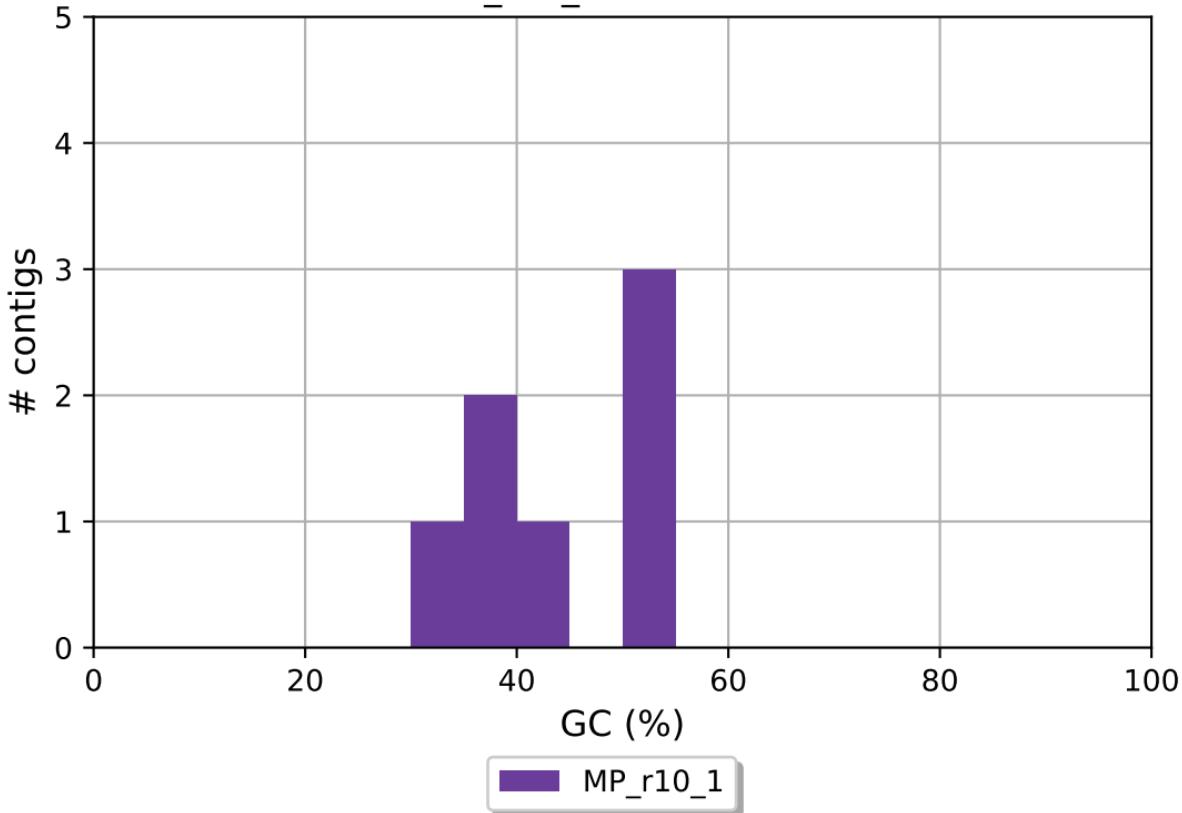
MP\_helen\_r10\_2 GC content



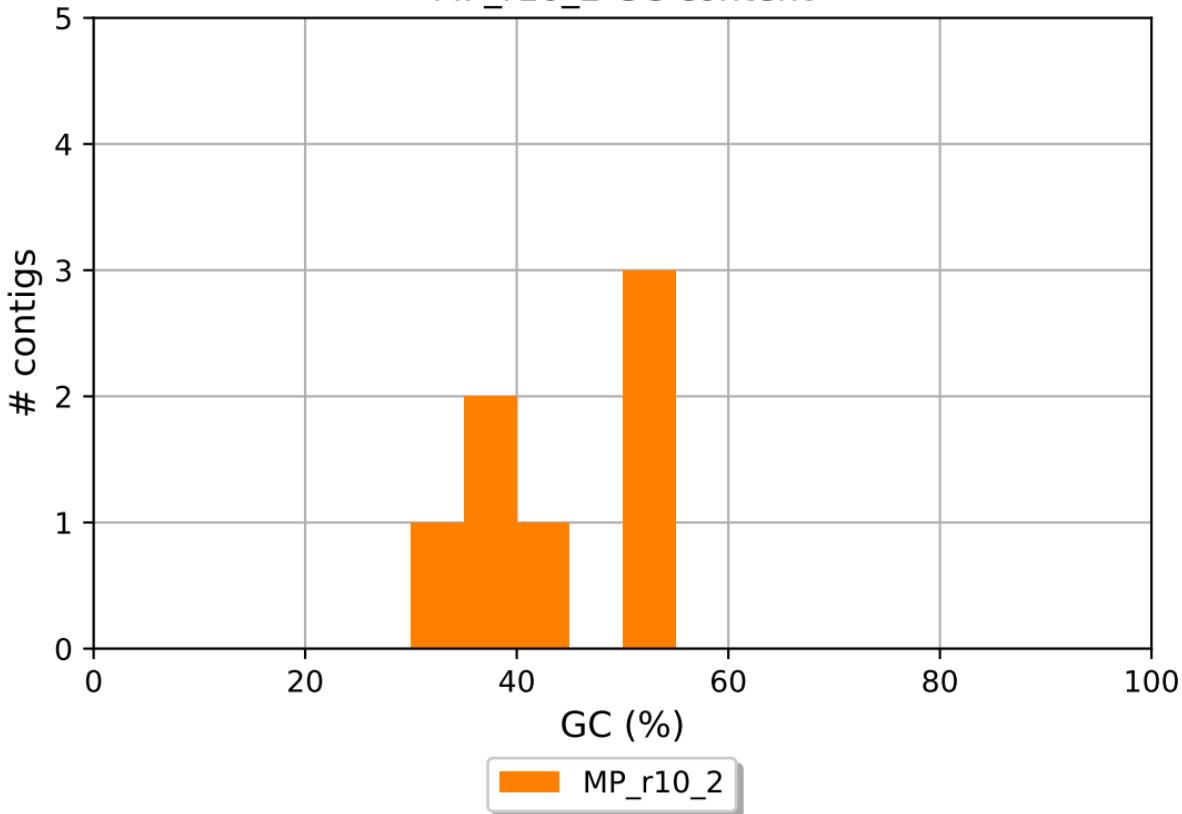
MP\_helen\_r10\_3 GC content



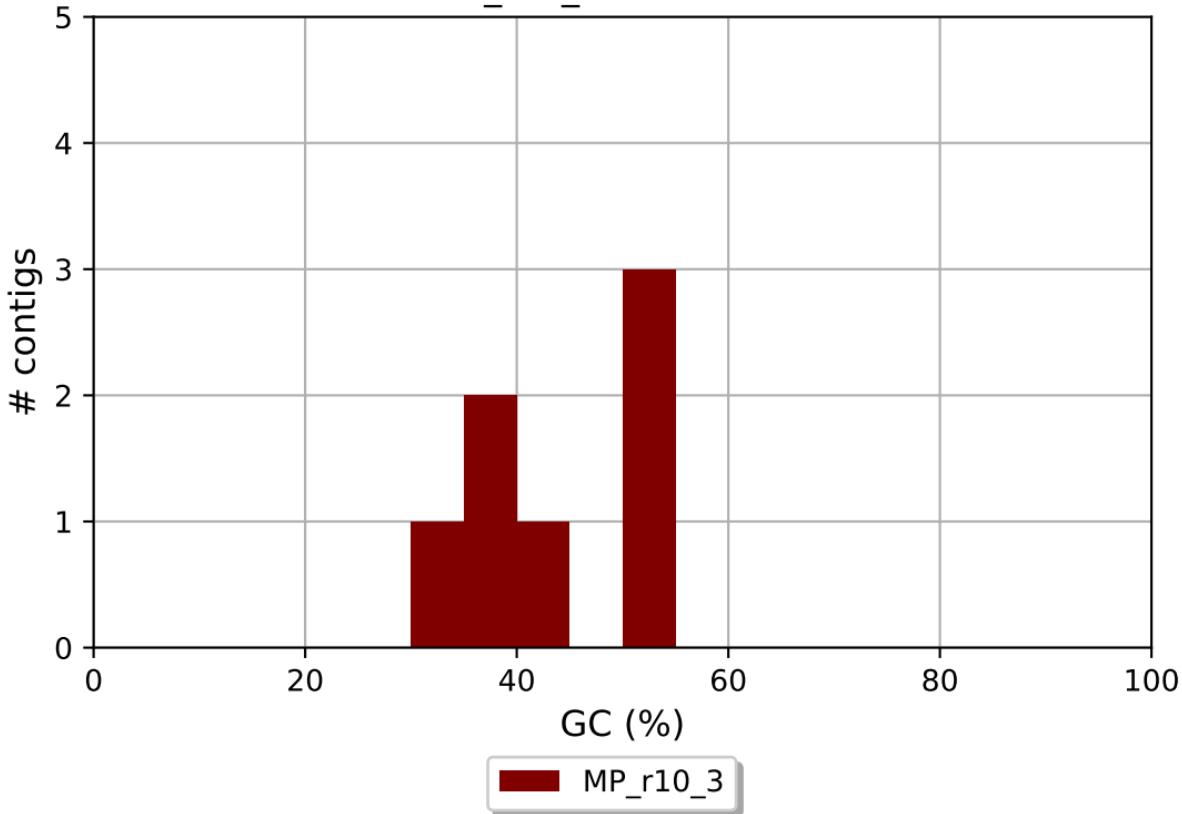
MP\_r10\_1 GC content



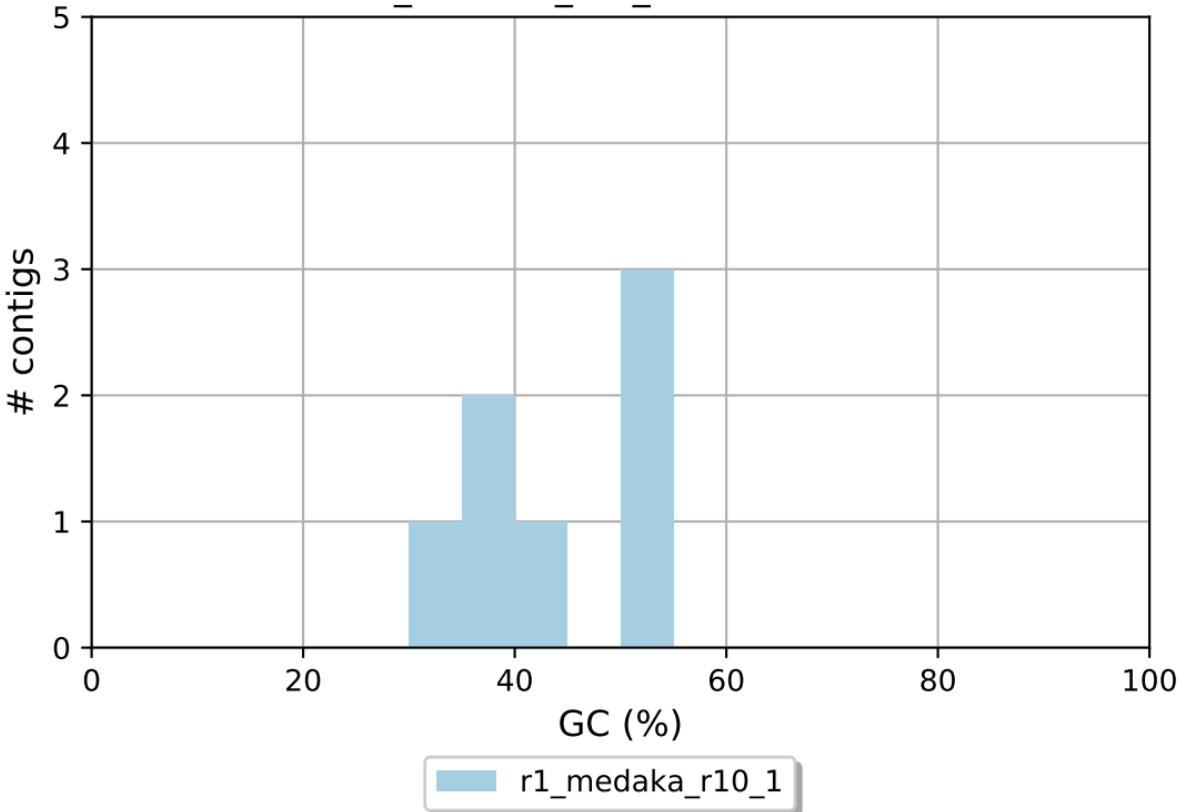
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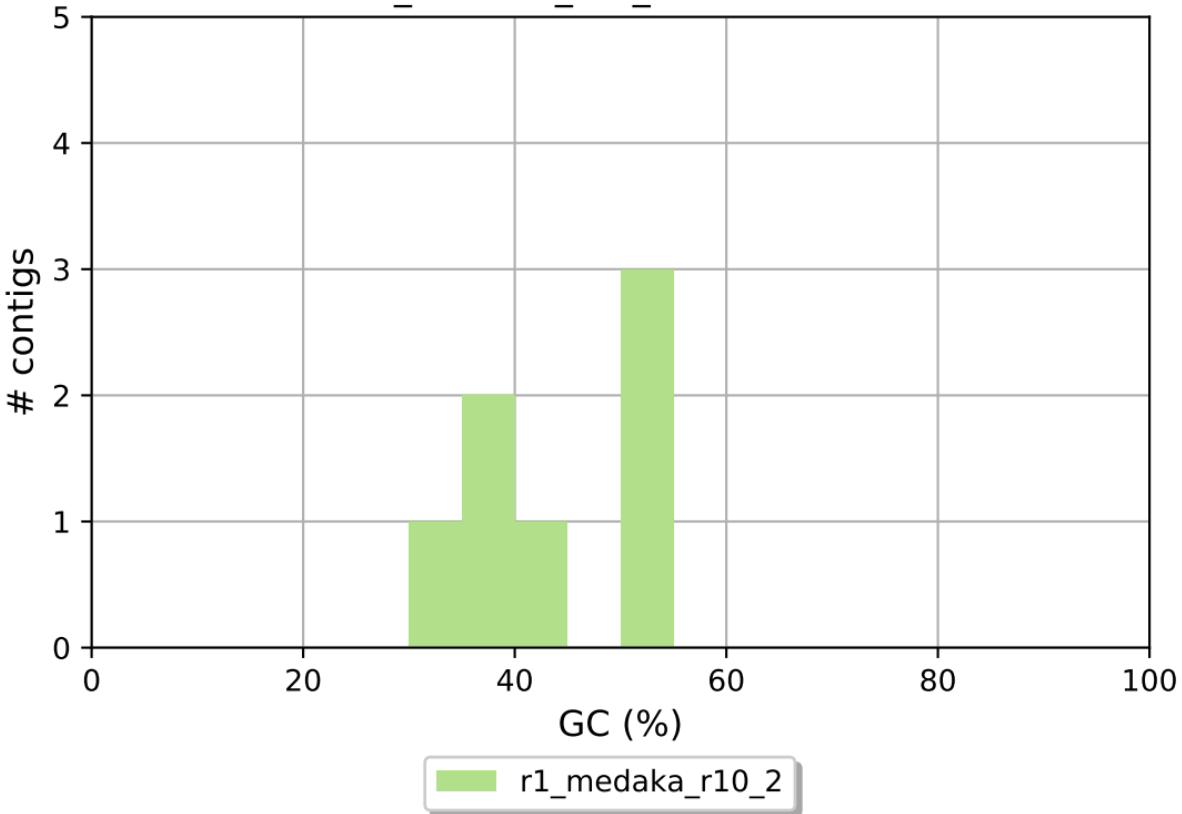
MP\_r10\_3 GC content



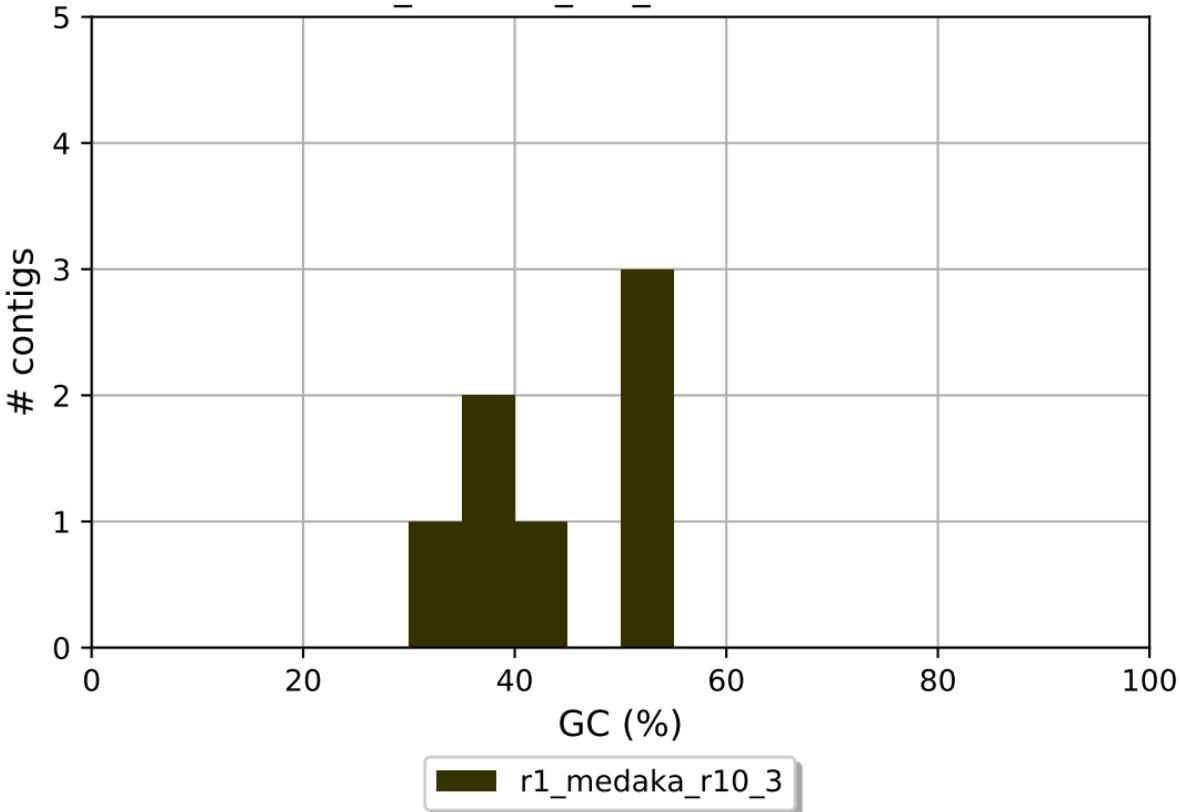
r1\_medaka\_r10\_1 GC content



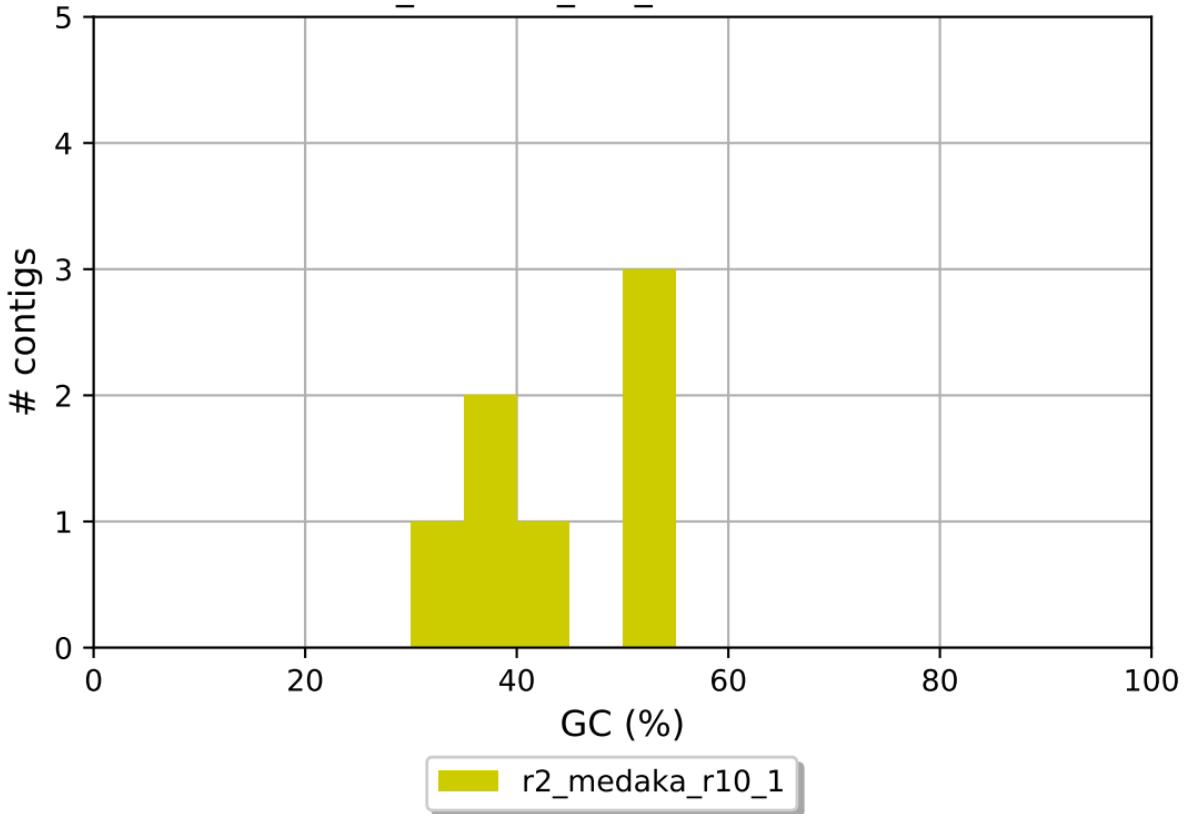
r1\_medaka\_r10\_2 GC content



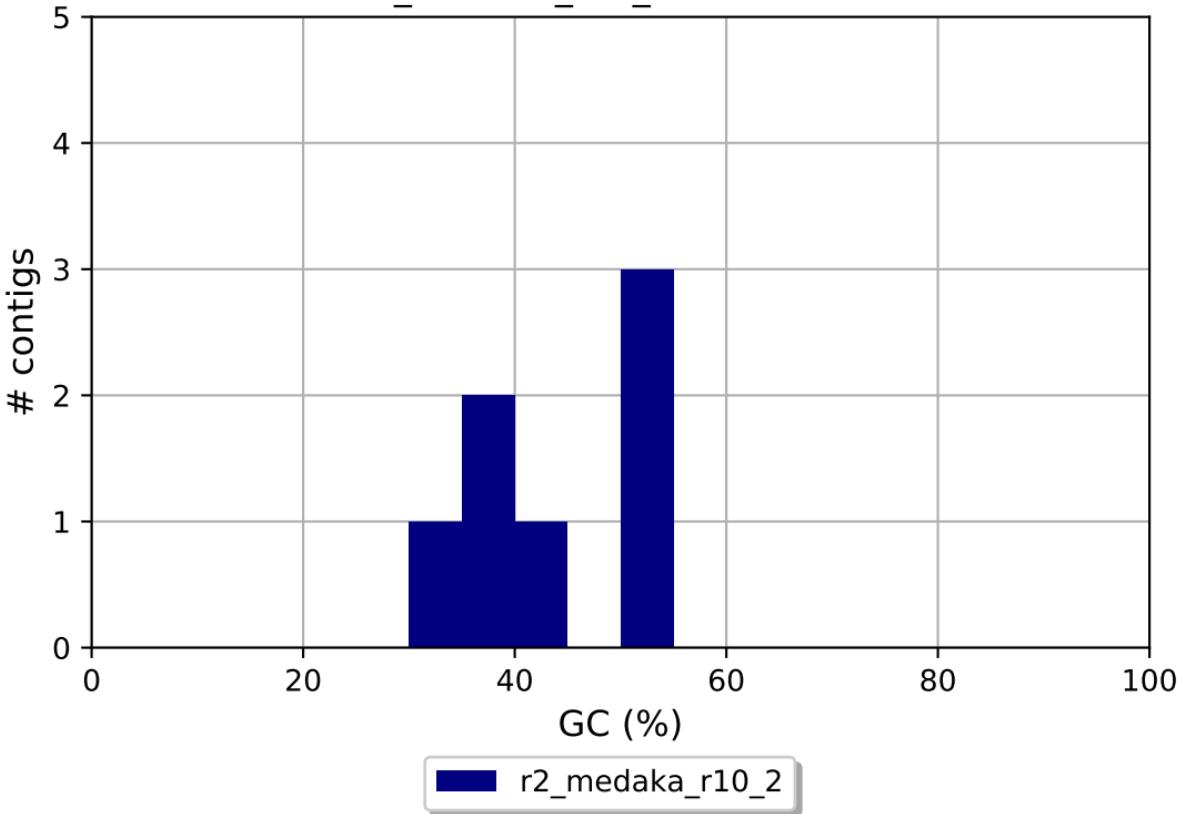
r1\_medaka\_r10\_3 GC content



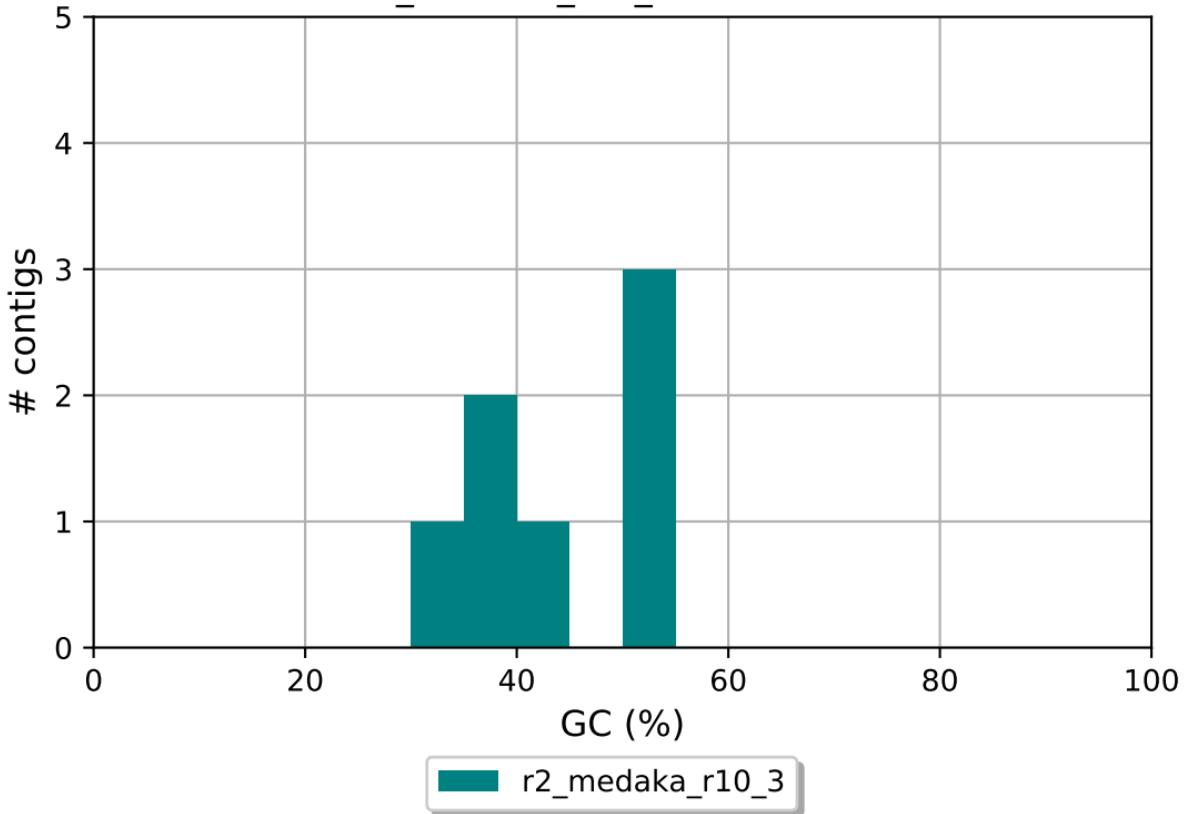
r2\_medaka\_r10\_1 GC content



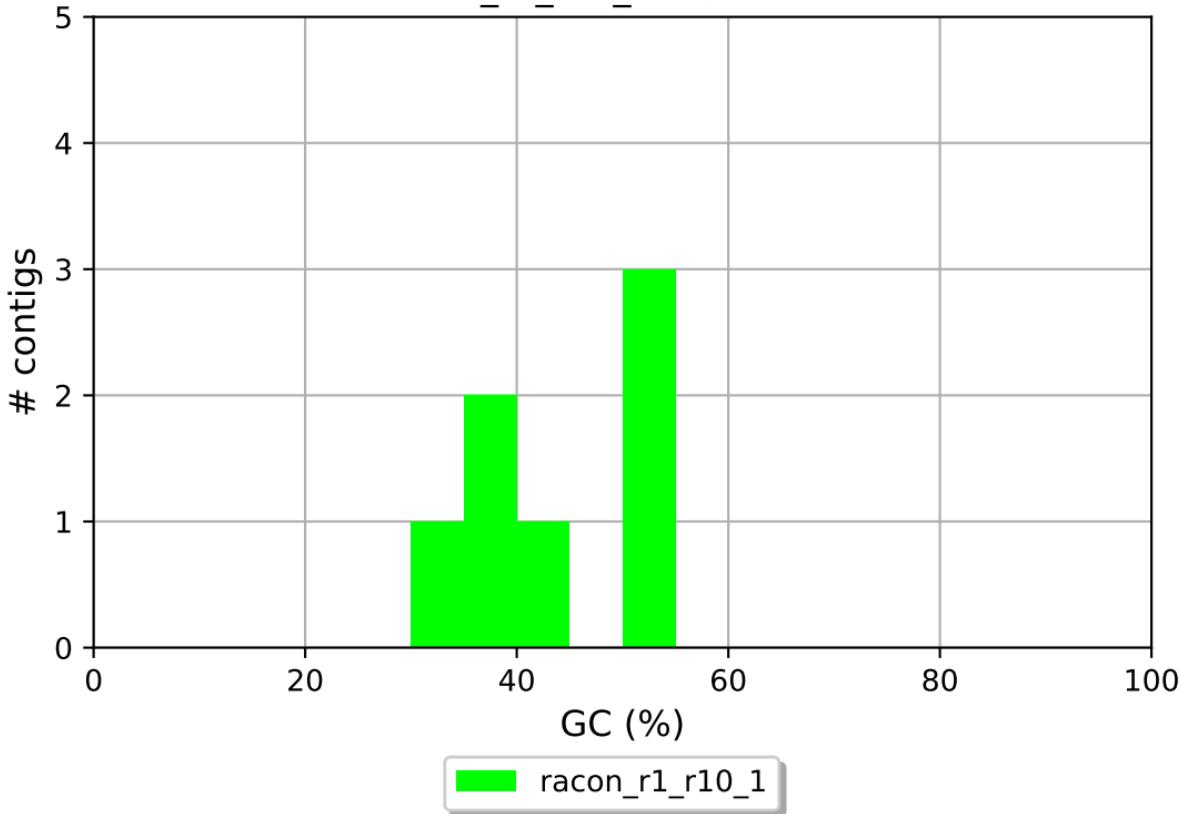
r2\_medaka\_r10\_2 GC content



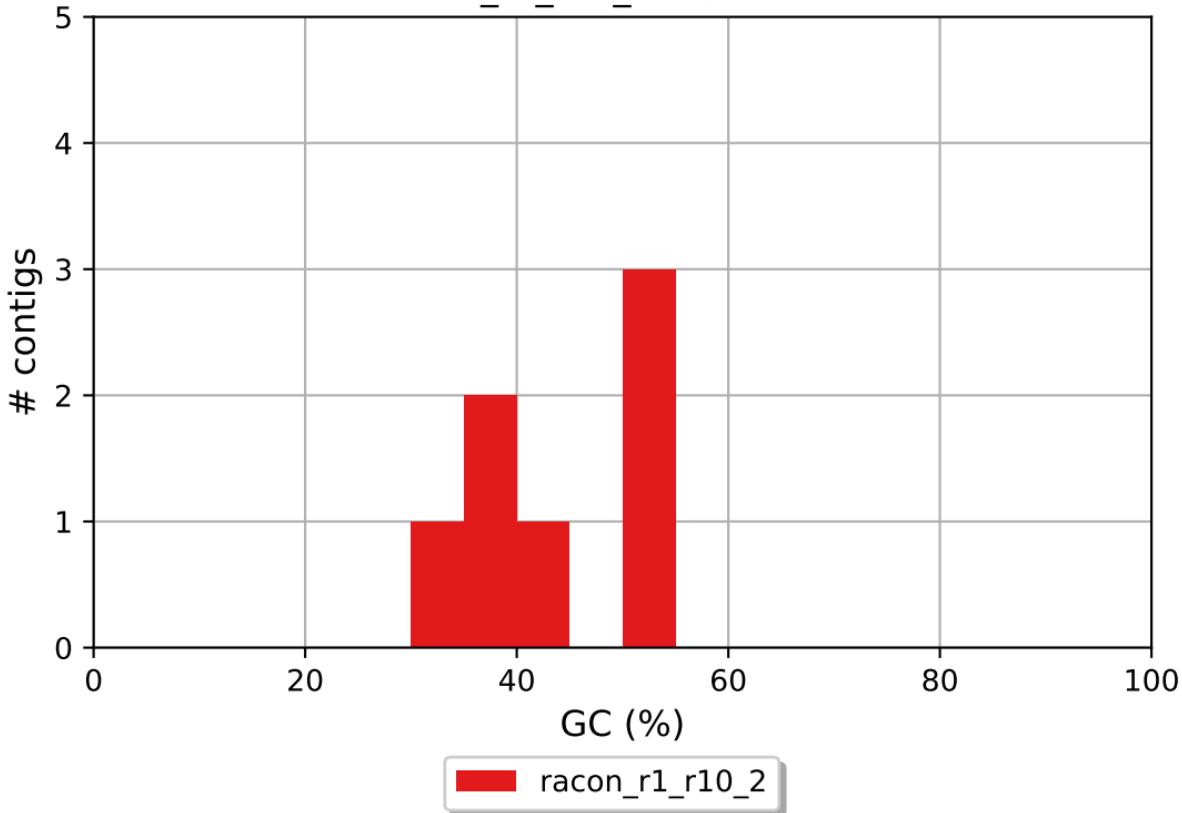
r2\_medaka\_r10\_3 GC content



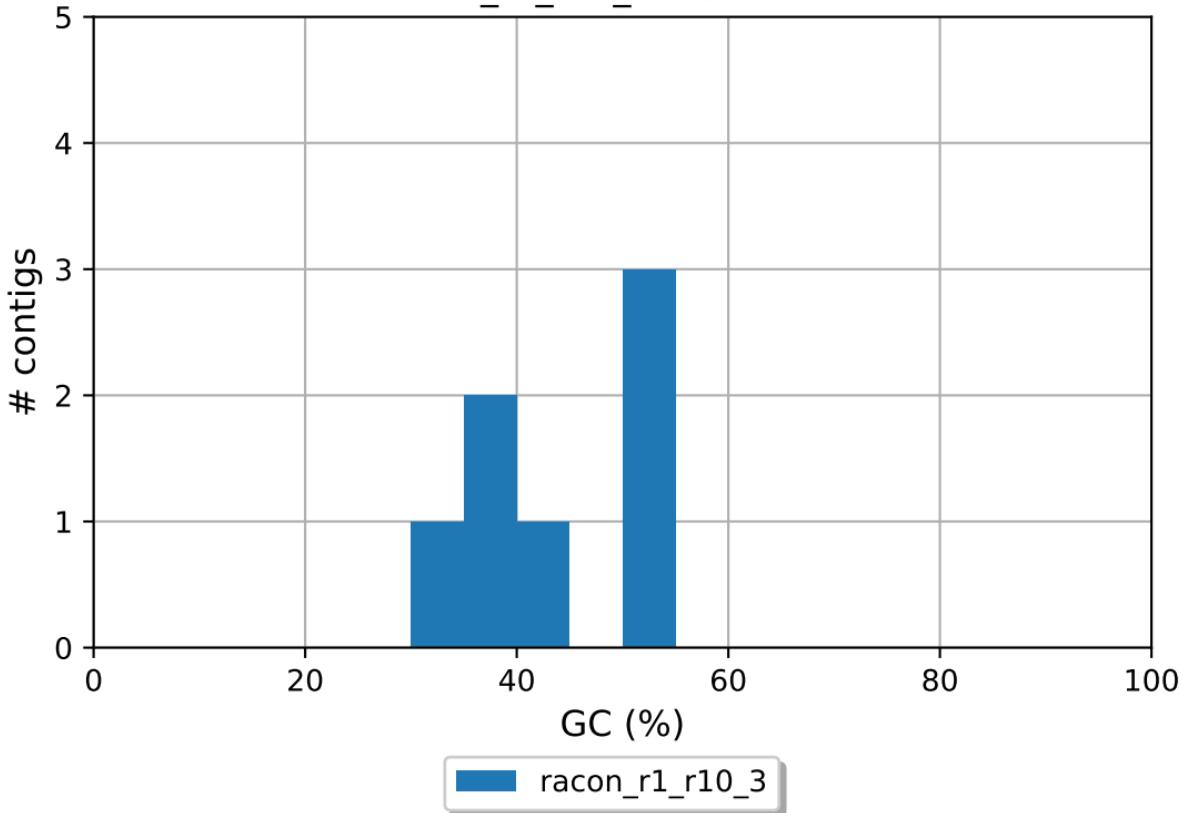
racon\_r1\_r10\_1 GC content



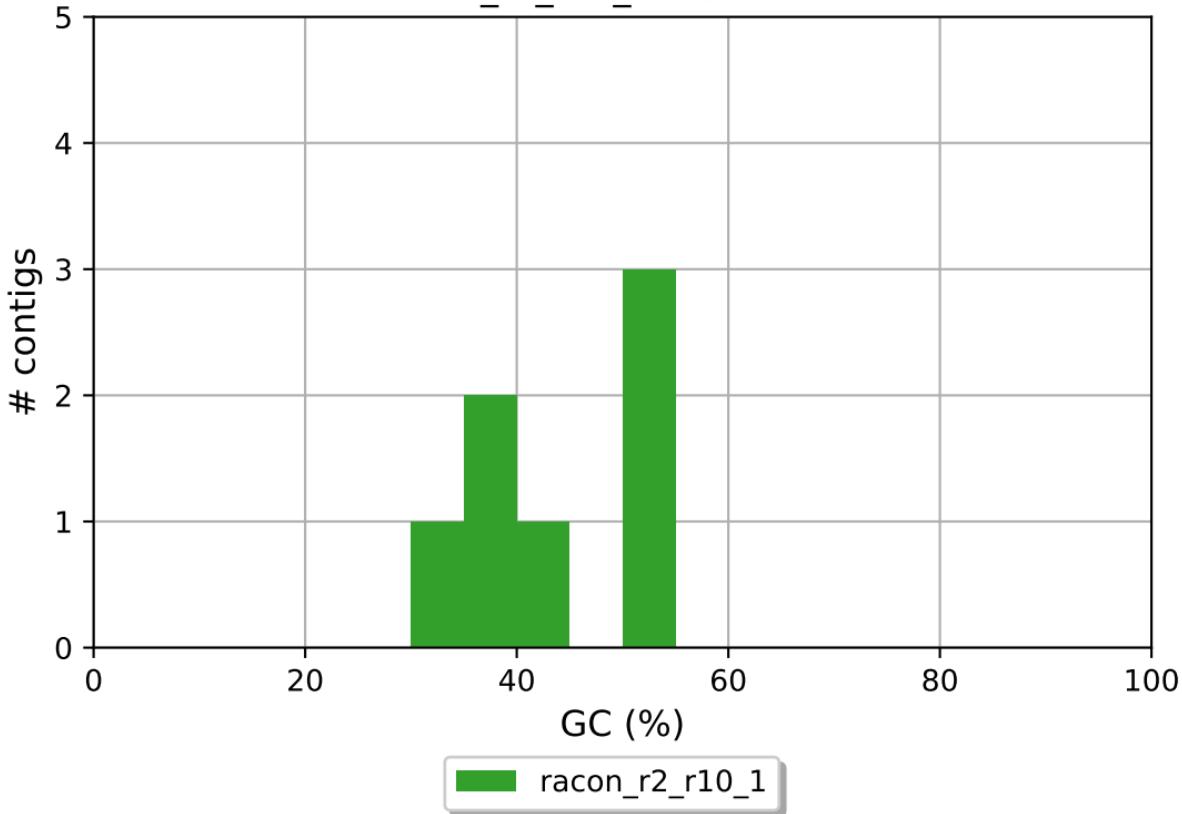
racon\_r1\_r10\_2 GC content



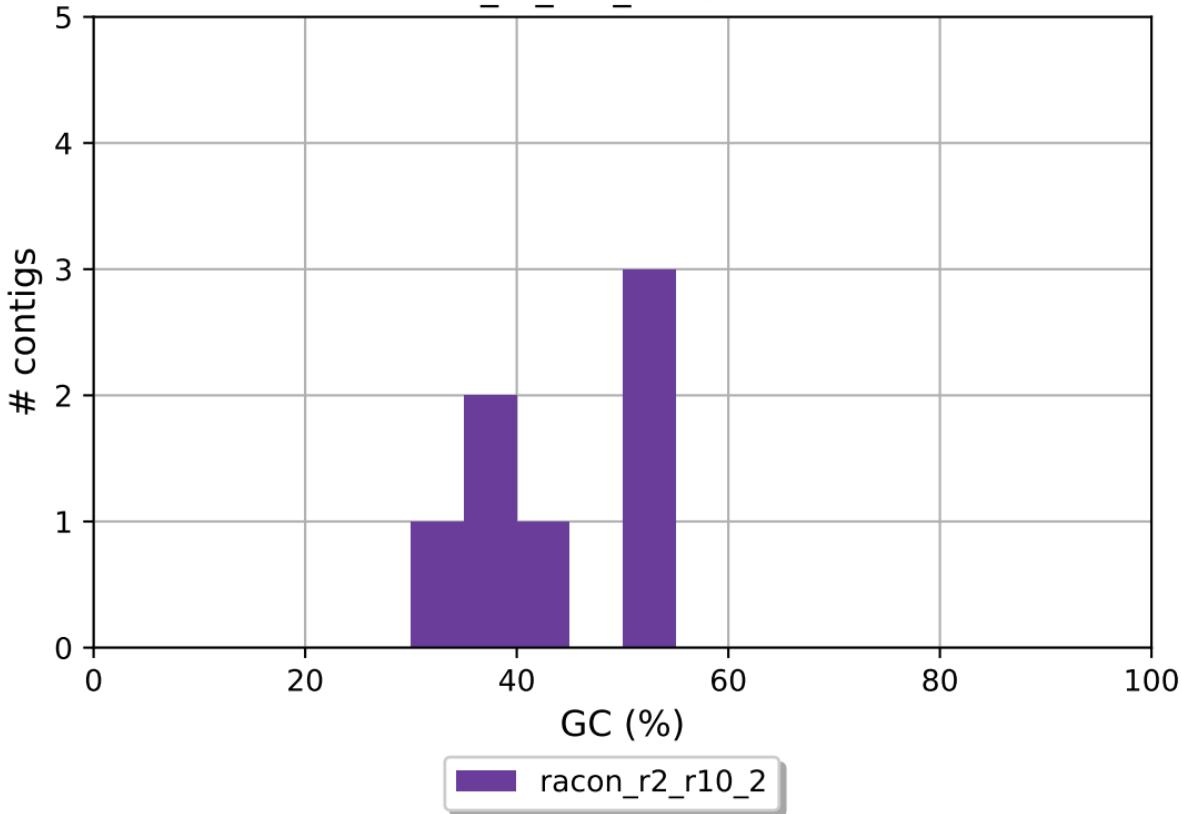
racon\_r1\_r10\_3 GC content



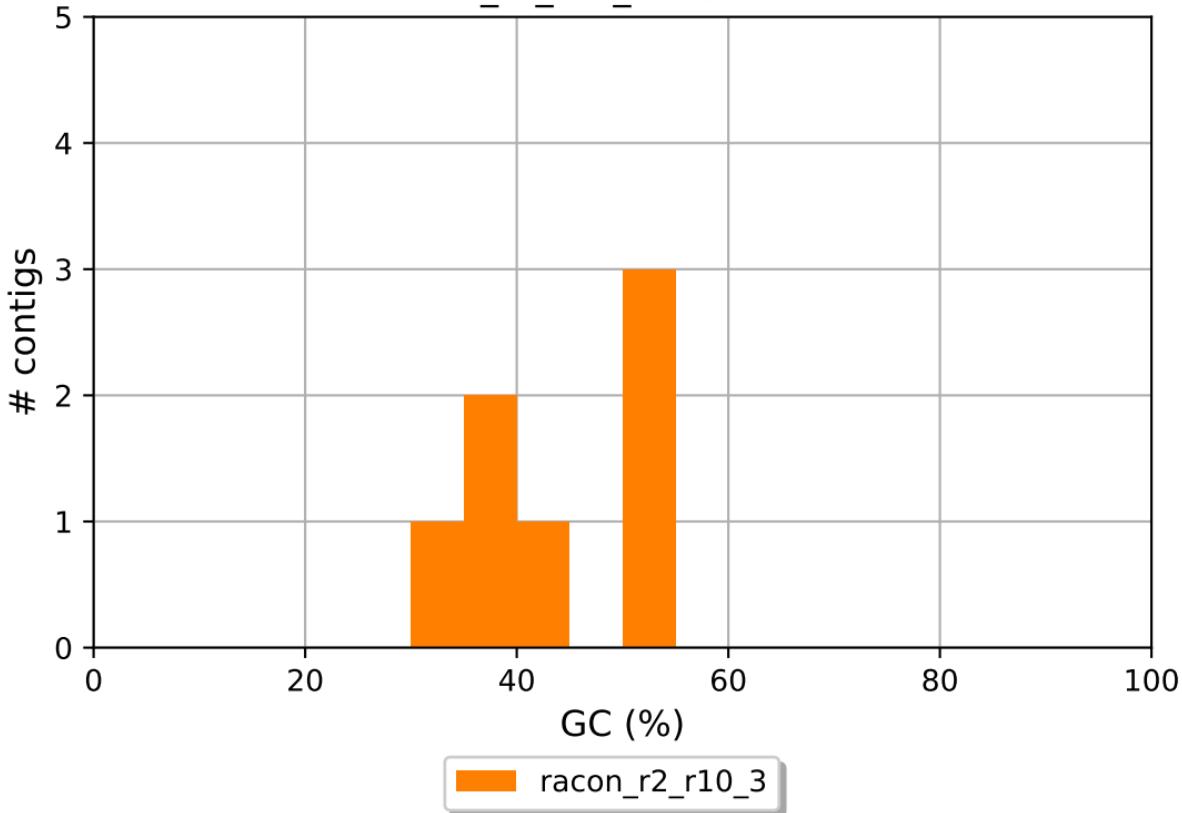
racon\_r2\_r10\_1 GC content



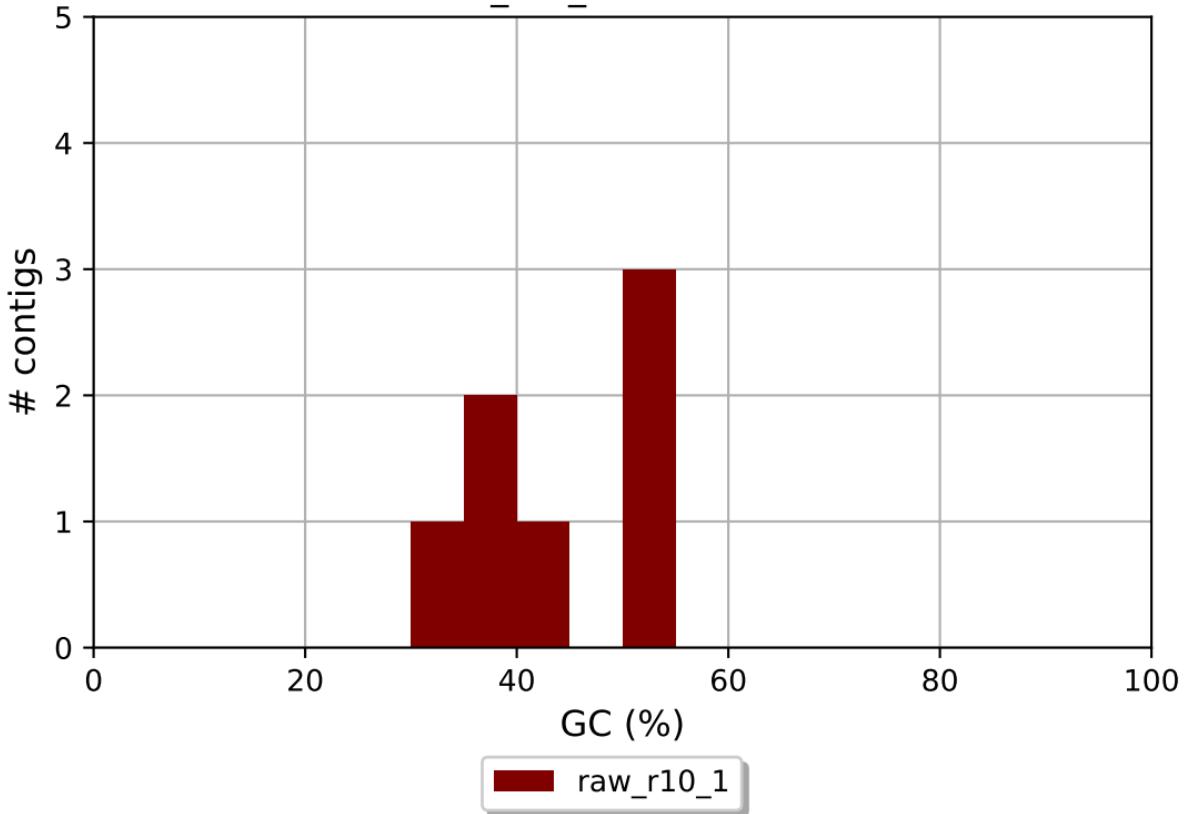
racon\_r2\_r10\_2 GC content



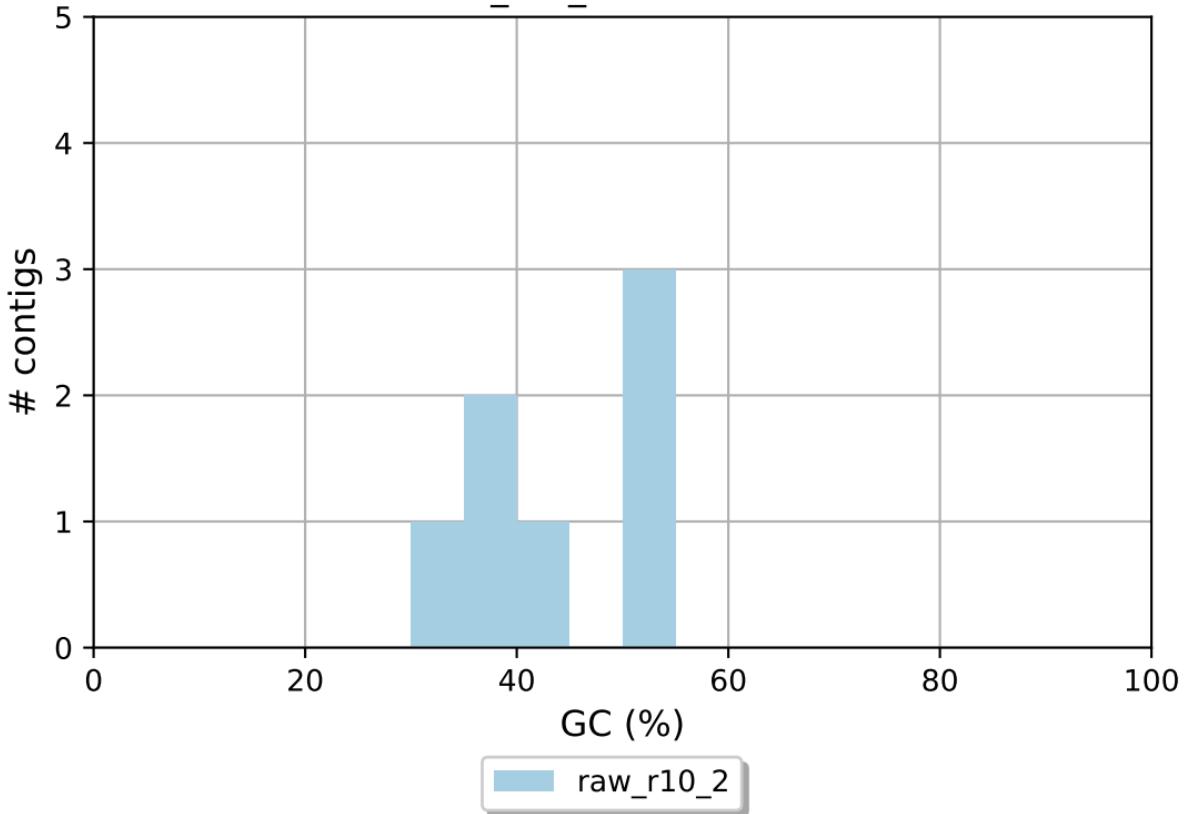
racon\_r2\_r10\_3 GC content



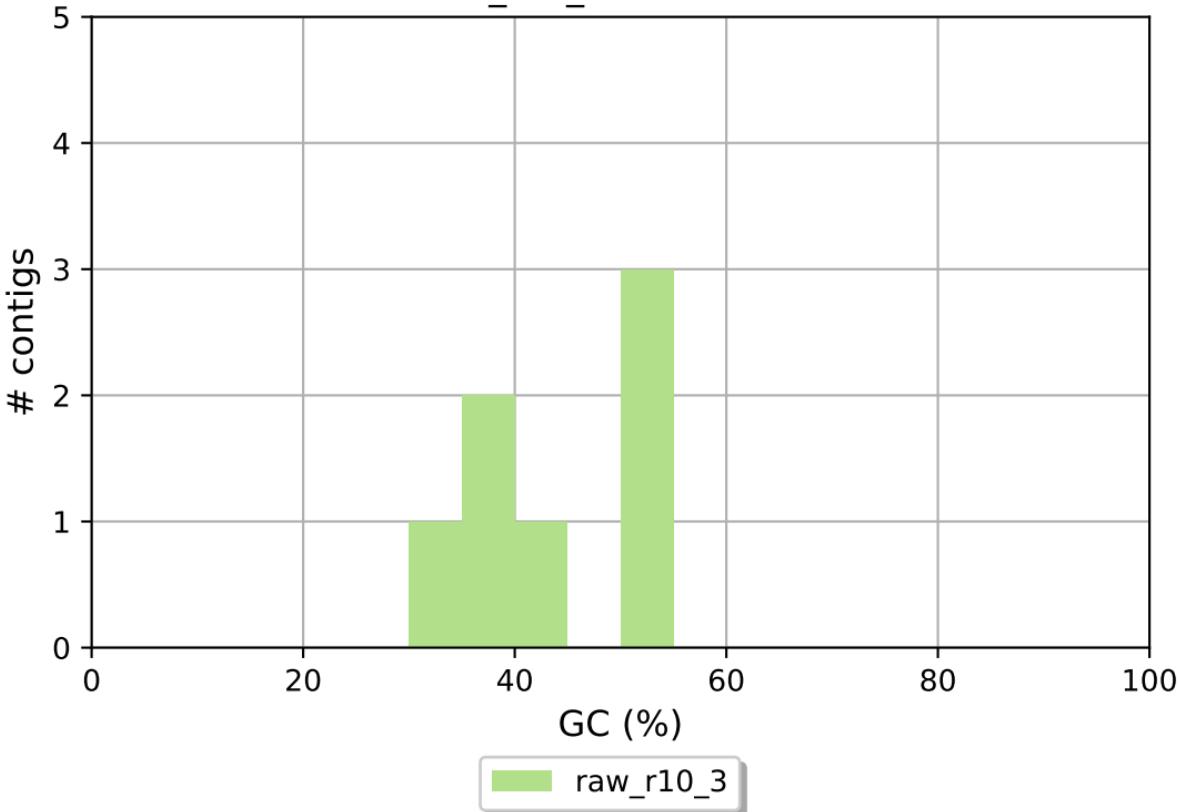
raw\_r10\_1 GC content



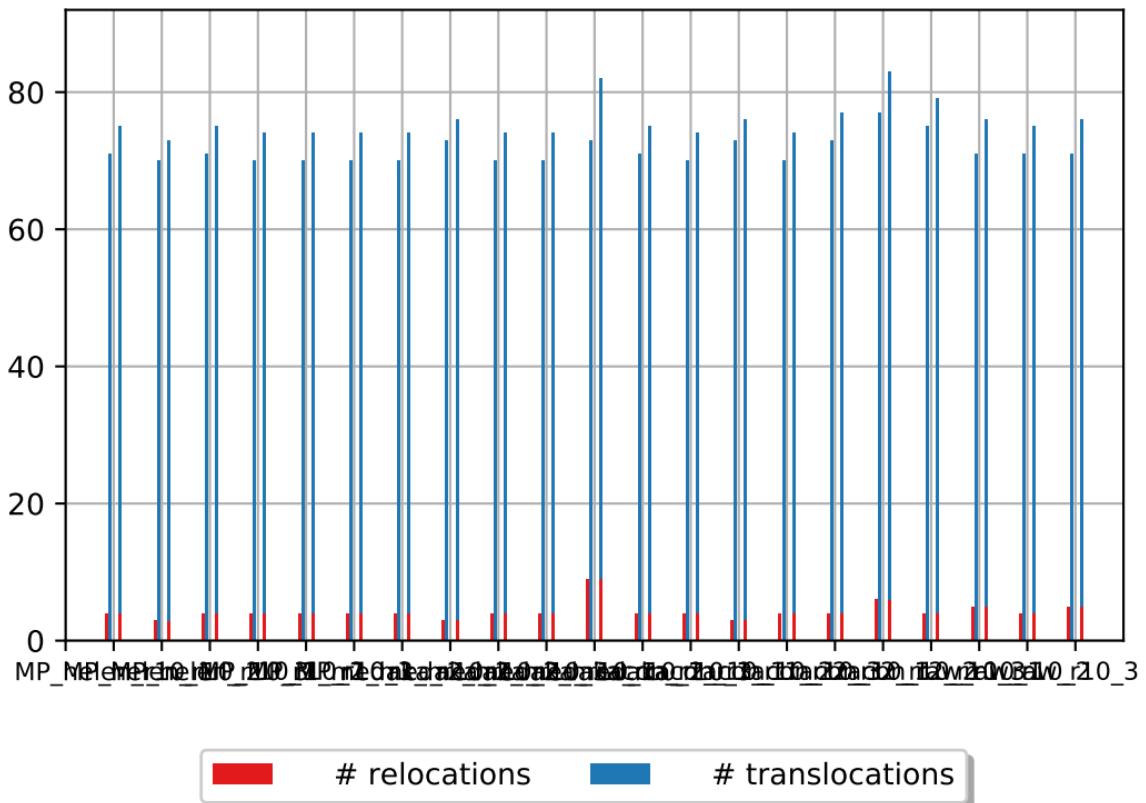
raw\_r10\_2 GC content



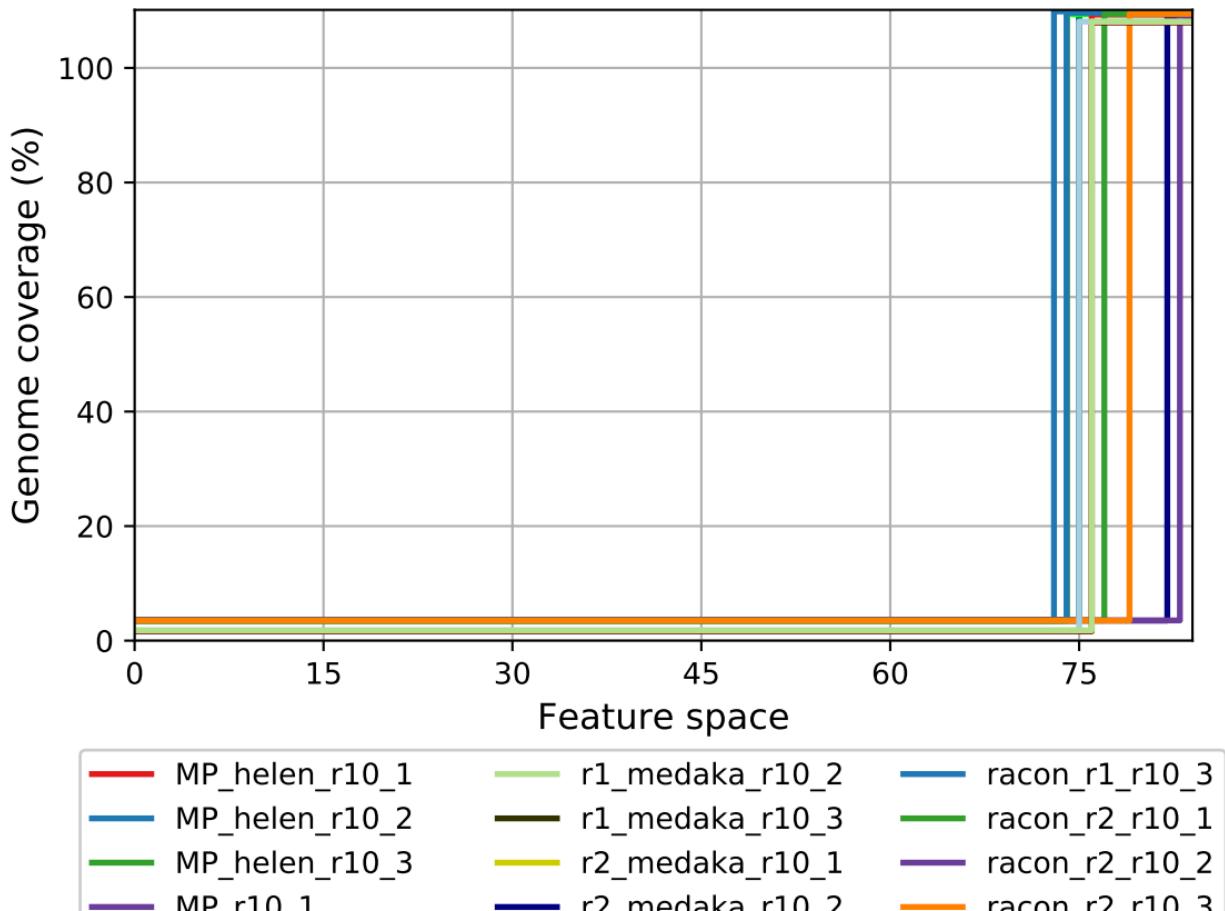
raw\_r10\_3 GC content



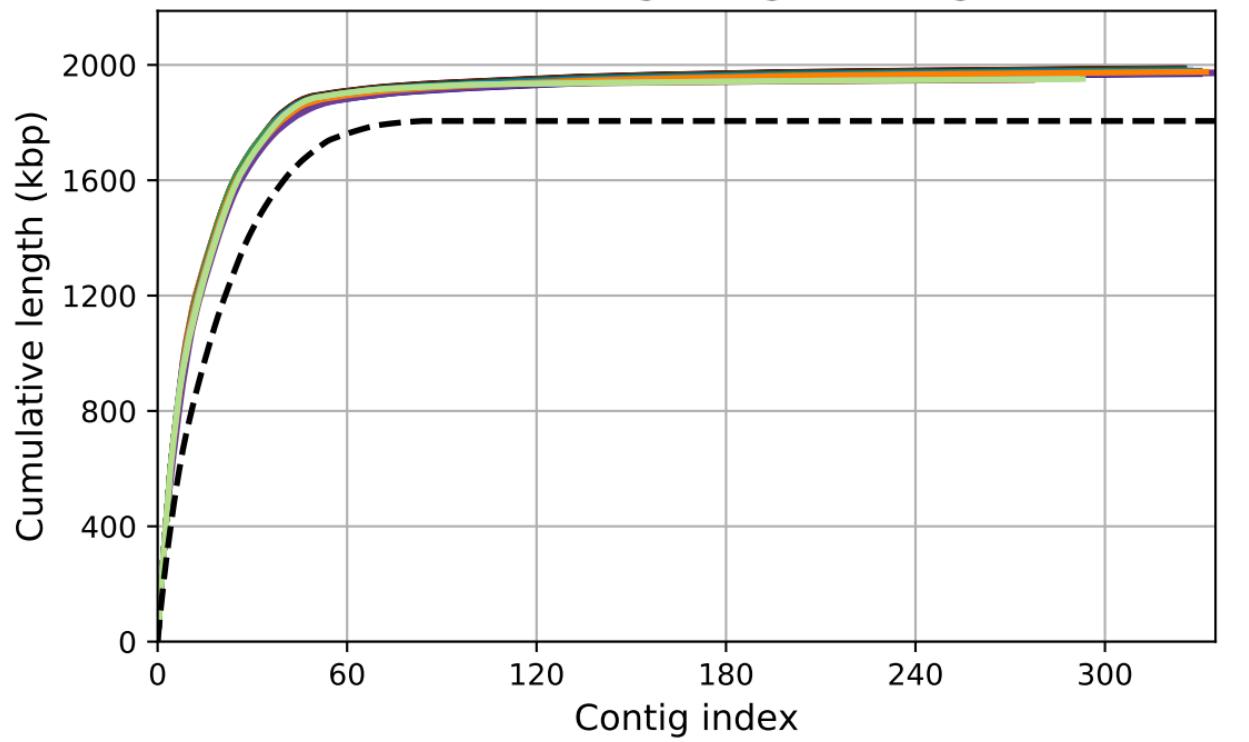
## Misassemblies



### FRCurve (misassemblies)

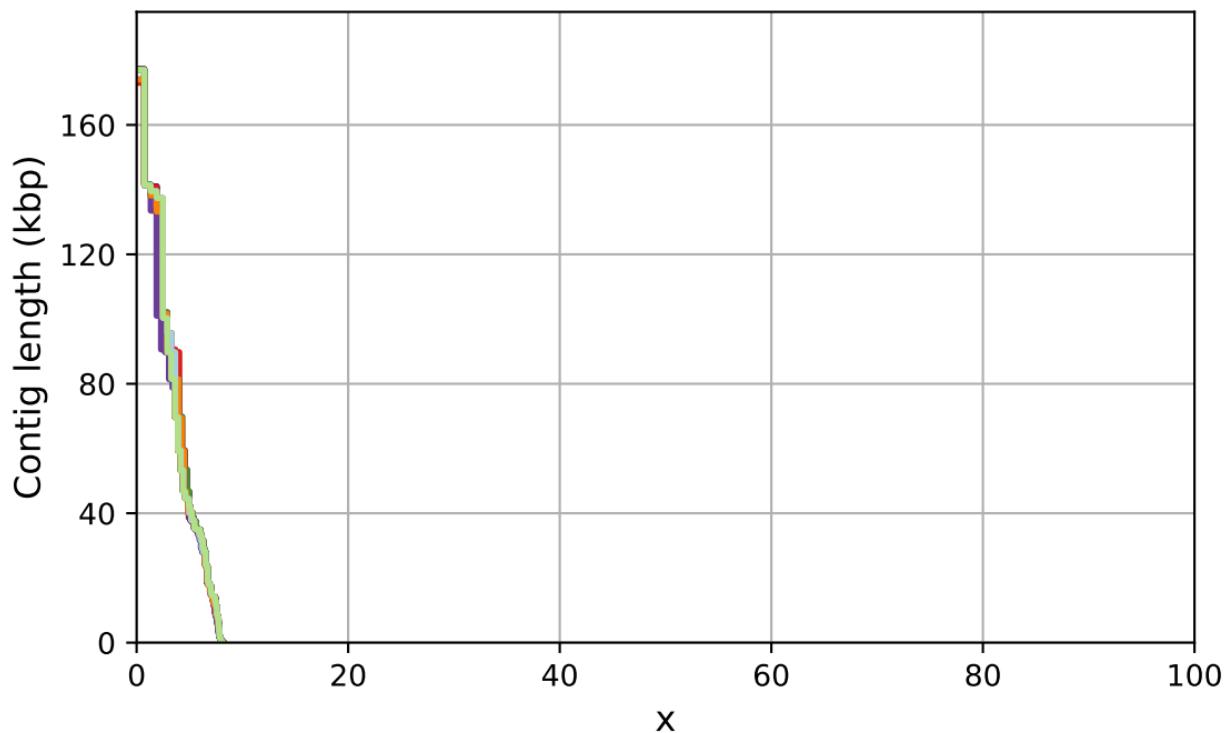


Cumulative length (aligned contigs)



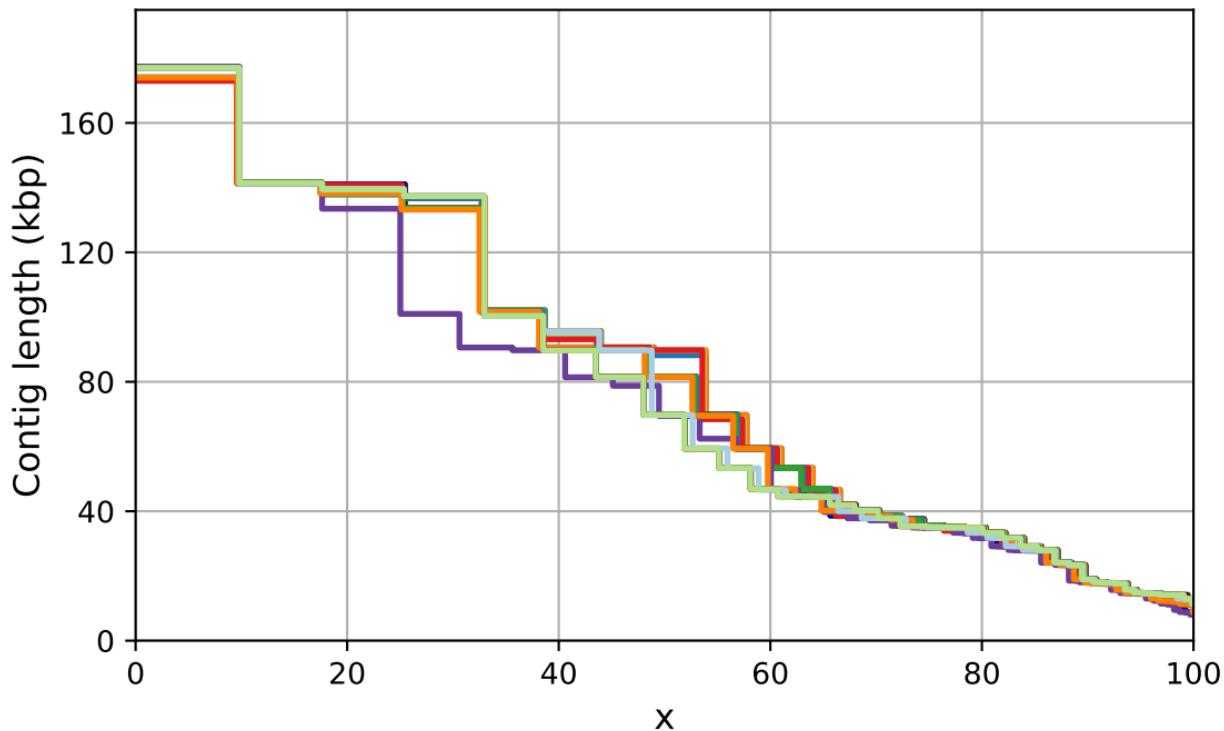
- MP\_helen\_r10\_1
- MP\_helen\_r10\_2
- MP\_helen\_r10\_3
- MP\_r10\_1
- r1\_medaka\_r10\_3
- r2\_medaka\_r10\_1
- r2\_medaka\_r10\_2
- r2\_medaka\_r10\_3
- racon\_r2\_r10\_1
- racon\_r2\_r10\_2
- racon\_r2\_r10\_3
- raw\_r10\_1

NAx



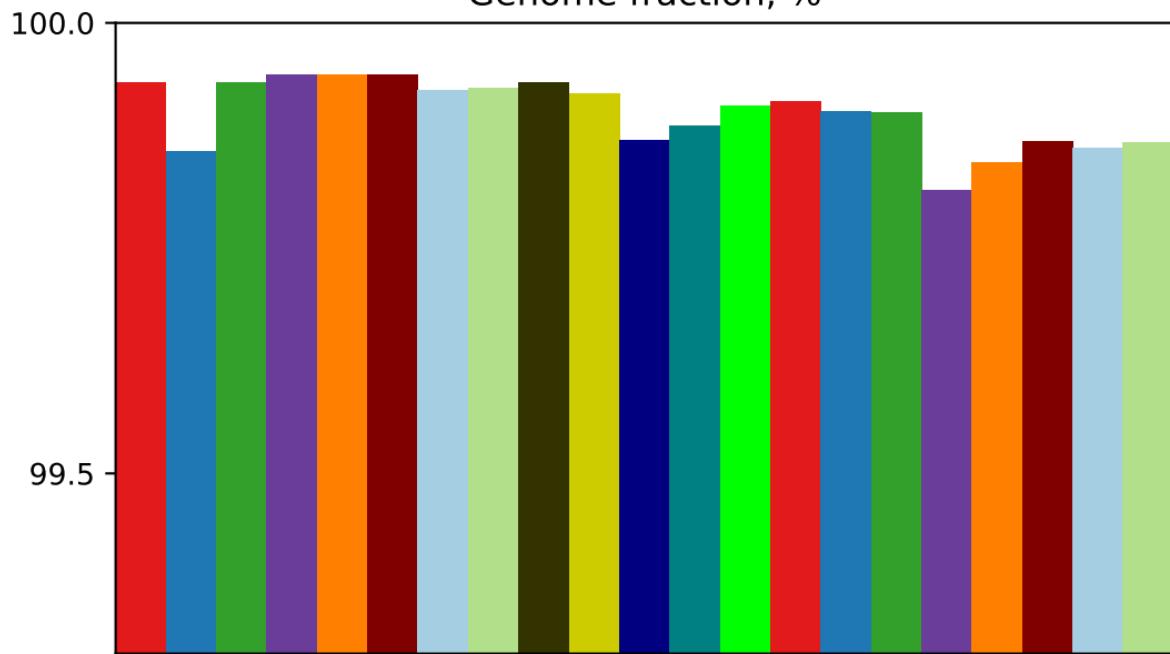
MP_helen_r10_1	r1_medaka_r10_2	racon_r1_r10_3
MP_helen_r10_2	r1_medaka_r10_3	racon_r2_r10_1
MP_helen_r10_3	r2_medaka_r10_1	racon_r2_r10_2
MP_r10_1	r2_medaka_r10_2	racon_r2_r10_3

# NGAx



- MP\_helen\_r10\_1
- MP\_helen\_r10\_2
- MP\_helen\_r10\_3
- MP\_r10\_1
- r1\_medaka\_r10\_2
- r1\_medaka\_r10\_3
- r2\_medaka\_r10\_1
- r2\_medaka\_r10\_2
- racon\_r1\_r10\_3
- racon\_r2\_r10\_1
- racon\_r2\_r10\_2
- racon\_r2\_r10\_3

Genome fraction, %



- MP\_helen\_r10\_1      ■ r1\_medaka\_r10\_2      ■ racon\_r1\_r10\_3
- MP\_helen\_r10\_2      ■ r1\_medaka\_r10\_3      ■ racon\_r2\_r10\_1
- MP\_helen\_r10\_3      ■ r2\_medaka\_r10\_1      ■ racon\_r2\_r10\_2
- MP\_r10\_1              ■ r2\_medaka\_r10\_2      ■ racon\_r2\_r10\_3
- MP\_r10\_2              ■ r2\_medaka\_r10\_3
- MP\_r10\_3