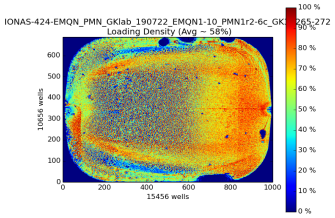
Run Summary

2.95 G Total Bases | **85** Key Signal

58% ISP Loading

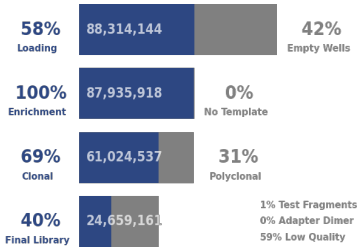
ISP Density



24,659,161 Total Reads

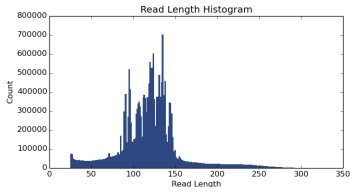
28% Usable Reads

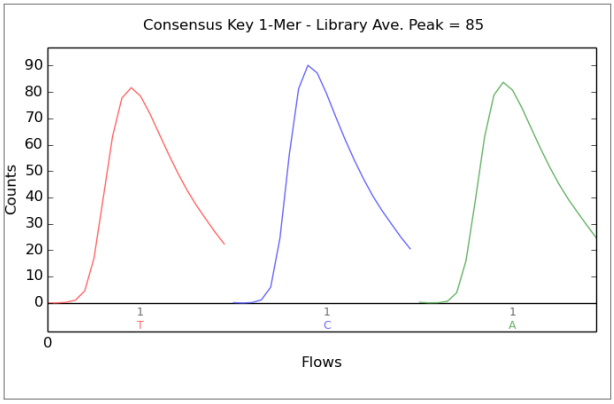
ISP Summary



120 bp Mean | **120 bp** Median | **134 bp** Mode

Read Length

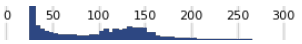


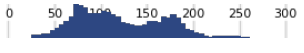


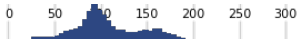
Addressable Wells	**151,539,288**	
With ISPs	88,314,144	58.3%
Live	87,935,918	99.6%
Test Fragment	565,314	00.6%
Library	87,370,604	99.4%

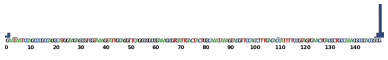
Library ISPs	**87,370,604**	
Filtered: Polyclonal	26,911,381	30.8%
Filtered: Low Quality	35,782,593	41.0%
Filtered: Adapter Dimer	17,469	00.0%
Final Library ISPs	**24,659,161**	**28.2%**

Notes: EMQN–Ampl-ColonLungV2-10_PMN-Ampl-ColonLungV2-6_GK3R8of24

Barcode Name	Sample	Bases	$\geq Q20$	Reads	Mean Read Length	Read Length Histogram
No barcode	none	118,890,820	89,721,182	1,131,876	105 bp	
IonXpress_001	EMQN-CLv2_ID1	31,389,648	28,214,282	305,474	102 bp	
IonXpress_002	EMQN-CLv2_ID2	99,695,831	89,407,640	879,531	113 bp	
IonXpress_003	EMQN-CLv2_ID3	233,547,068	206,687,259	1,958,731	119 bp	
IonXpress_004	EMQN-CLv2_ID4	262,471,522	230,429,853	2,114,379	124 bp	
IonXpress_005	EMQN-CLv2_ID5	181,603,560	160,946,566	1,513,827	119 bp	

IonXpress_006	EMQN-CLv2_ID6	201,266,895	177,600,872	1,688,246	119 bp	
IonXpress_007	EMQN-CLv2_ID7	166,901,278	147,245,259	1,413,773	118 bp	
IonXpress_008	EMQN-CLv2_ID8	235,542,329	207,561,791	1,998,743	117 bp	
IonXpress_009	EMQN-CLv2_ID9	148,530,617	131,774,062	1,254,303	118 bp	
IonXpress_010	EMQN-CLv2_ID10	134,810,966	118,976,346	1,124,706	119 bp	
IonXpress_012	none	2,954,587	2,536,014	27,660	106 bp	
IonXpress_015	none	10,616,968	9,584,426	106,145	100 bp	
IonXpress_017	GK3R265_DARE-endo	56,733,346	46,078,823	433,945	130 bp	
IonXpress_018	GK3R266_DARE-fibro	28,913,788	22,965,203	218,296	132 bp	
IonXpress_019	GK3R267_DARE-endo	37,197,437	30,703,847	286,628	132 bp	
IonXpress_020	GK3R268_DARE-fibro	83,296,547	66,473,952	597,848	139 bp	
IonXpress_021	GK3R269_DARE-endo	78,585,960	63,843,886	612,642	128 bp	
IonXpress_022	GK3R270_DARE-fibro	55,028,411	44,973,705	418,581	133 bp	
IonXpress_023	GK3R271_DARE-endo	111,433,289	89,844,681	814,979	136 bp	
IonXpress_024	GK3R272_DARE-	84,788,383	68,861,164	631,312	134 bp	
IonXpress_027	PMN-S1r2_Q1DP	84,214,490	75,678,263	741,458	113 bp	
IonXpress_028	PMN-S2r2_Q2DP	94,415,268	85,632,663	849,390	111 bp	
IonXpress_029	PMN-S3r2_Q3DP	67,905,209	60,658,408	597,293	113 bp	
IonXpress_030	PMN-S4r2_Q4DP	51,015,811	45,552,130	444,350	114 bp	
IonXpress_031	PMN-S4c_Q4DP	151,999,748	133,189,458	1,328,498	114 bp	
IonXpress_032	PMN-S6c_Q6DP	59,266,663	52,727,365	525,552	112 bp	
IonXpress_033	none	3,757,520	3,073,432	31,202	120 bp	

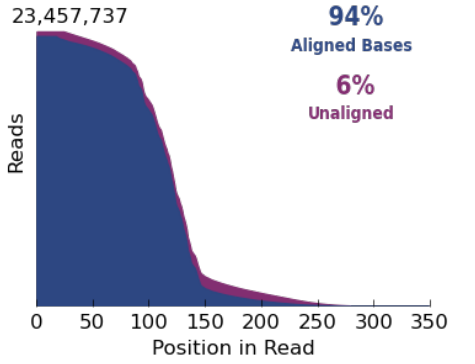
IonXpress_034	none	9,605,350	7,884,580	76,007	126 bp	
IonXpress_042	none	4,427,184	3,654,146	38,567	114 bp	
IonXpress_043	none	8,339,967	6,875,987	78,295	106 bp	
IonXpress_044	none	12,837,666	10,715,986	99,048	129 bp	
IonXpress_045	none	7,372,912	6,128,519	64,121	114 bp	
IonXpress_046	none	18,315,982	15,317,803	134,730	135 bp	
IonXpress_047	none	5,823,312	4,892,917	49,477	117 bp	

Test Fragment	Reads	Percent 50AQ17	Read Length Histogram
TF_C	**437,136**	**95**	
TF_1	**84,874**	**84**	

Alignment Summary *(aligned to Homo sapiens)*

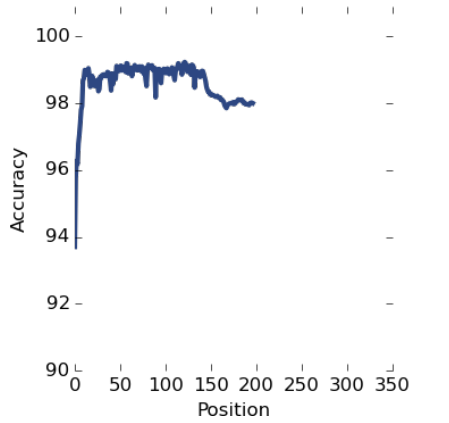
2.65 G
Total Alignment Bases

0.9X
Average Coverage Depth of Reference



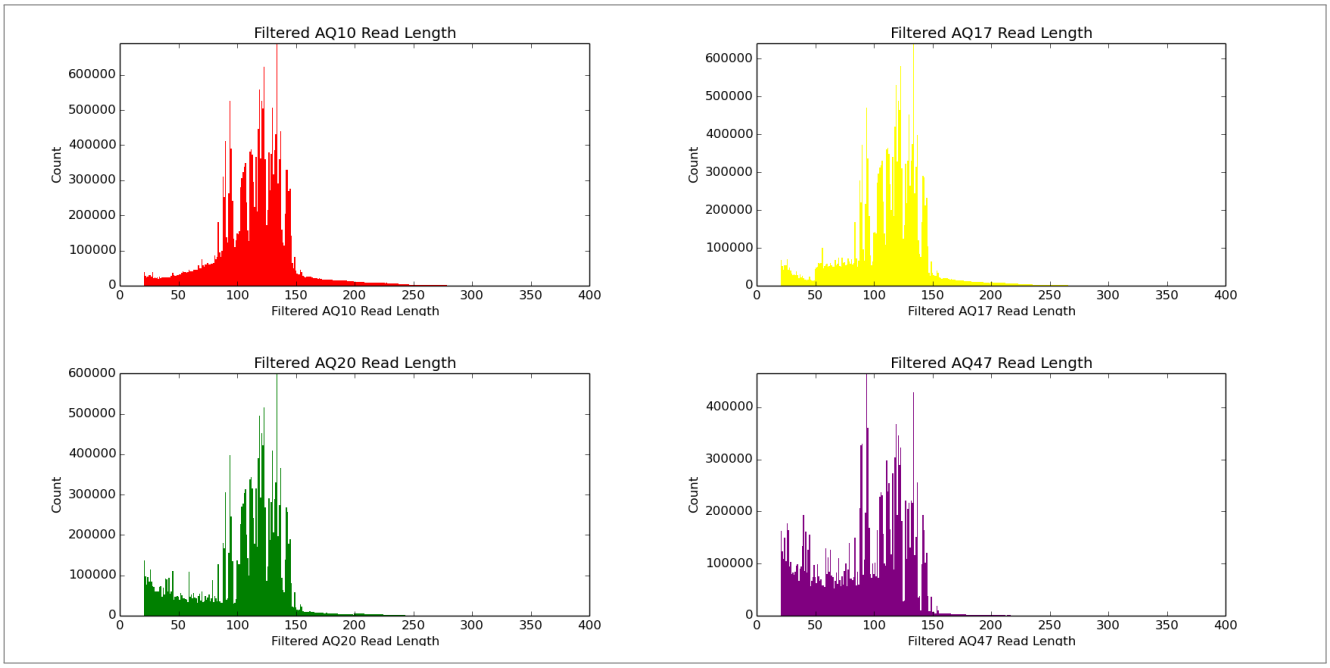
	Count	%
Total Reads	23,457,737	–
Aligned Reads	23,065,565	98.3%
Unaligned Reads	392,172	1.7%

98.7%
Mean Raw Accuracy 1x



Alignment Quality

	AQ17	AQ20	Perfect
Total Number of Bases [Mbp]	2.27 G	1.94 G	1.58 G
Mean Length [bp]	112	105	92
Longest Alignment [bp]	332	319	317
Mean Coverage Depth	0.7	0.6	0.5


Filtered AQ10 Read Length
Count
Filtered AQ10 Read Length
Filtered AQ17 Read Length
Count
Filtered AQ17 Read Length
Filtered AQ20 Read Length
Count
Filtered AQ20 Read Length
Filtered AQ47 Read Length
Count
Filtered AQ47 Read Length

Analysis Details

Run Name	R_2019_07_23_11_37_50_user_IONAS-424-EMQN_PMN_GKlab_190722_EMQN1-10_PMN1r2-6c_GK3R265-272
Run Date	July 23, 2019, 11:39 a.m.
Run Flows	500
Projects	PMN_Ampl_ColonLungV2 , EMQN_Ampl_ColonLungV2 , GKLab_3RNAseq
Sample	PMN-S4r2_Q4DP, EMQN-CLv2_ID3, EMQN-CLv2_ID4, EMQN-CLv2_ID5, PMN-S3r2_Q3DP, PMN-S2r2_Q2DP, EMQN-CLv2_ID1, EMQN-CLv2_ID2, EMQN-CLv2_ID6, PMN-S4c_Q4DP, PMN-S6c_Q6DP, EMQN-CLv2_ID7, EMQN-CLv2_ID8, EMQN-CLv2_ID9, EMQN-CLv2_ID10, PMN-S1r2_Q1DP, GK3R271_DAREdd3-endo, GK3R270_DAREdd2-fibro, GK3R272_DAREdd3_fibro, GK3R269_DAREdd2-endo, GK3R267_DAREdd1-endo, GK3R265_DARECad3-endo, GK3R266_DARECad3-fibro, GK3R268_DAREdd1-fibro
Reference	
Instrument	IONAS
Operation Mode	Service mode
Flow Order	TACGTACGTCTGAGCATCGATCGATGTACAGC
Library Key	TCAG
TF Key	ATCG
Chip Barcode	DAEC04358
Chip Check	Passed
Chip Type	P1.1.17
Chip Data	tiled
Chip Lot Number	QPW140
Chip Wafer	24
Barcode Set	IonXpress
Analysis Name	IONAS-424-EMQN_PMN_GKlab_190722_GK3R265-272_DNAother
Analysis Date	July 24, 2019, 12:42 p.m.
Analysis Flows	0
runID	7PG4G
BeadFind Args	justBeadFind –args-json /opt/ion/config/args_P1.1.17_beadfind.json
Analysis Args	Analysis –args-json /opt/ion/config/args_P1.1.17_analysis.json
Pre-BaseCaller	BaseCaller –barcode-filter 0.01 –barcode-filter-minreads 10 –phasing-residual-filter=2.0 –max-phasing-levels 2
Calibration Args	Calibration
BaseCaller Args	BaseCaller –barcode-filter 0.01 –barcode-filter-minreads 10 –phasing-residual-filter=2.0 –max-phasing-levels 2 –num-unfiltered 1000 –barcode-filter-postpone 1
Alignment Args	tmap mapall ... stage1 map4
IonStats Args	ionstats alignment
Analysis Parameters	default

Chef Summary

Chef Template Prep Information:

Chef Last Updated	July 23, 2019, 11:03 a.m.
Chef Instrument Name	CHEF00509
Chef Operation Mode	Customer Mode
Sample Position	1
Tip Rack Barcode	4560901A3
Chip Type 1	P1v3
Chip Type 2	P1v3
Chip Expiration 1	Mar2019
Chip Expiration 2	Mar2019
Templating Kit Type	Ion PI Hi-Q Chef Kit
Reagent Expiration	170731
Reagent Lot Number	1810853
Reagent Part Number	A27284C
Solution Lot Number	1702670
Solution Part Number	A27282C
Solution Expiration	160531
Templating Protocol Executed	(use instrument default)
Templating Protocol Planned	(use instrument default)
Chef Script Version	609
Chef Package Version	IC.5.6.0
Start Time	July 22, 2019, 5:41 p.m.
Completion Time	July 23, 2019, 11:03 a.m.

Software Version

Torrent_Suite	5.6.0
host	FW7DQV1
ion-analysis	5.6.8-1
ion-chefupdates	5.6.0
ion-dbreports	5.6.37-1
ion-gpu	5.6.0-1
ion-pipeline	5.6.12-1
ion-plugins	5.6.16-1
ion-protonupdates	5.6.0
ion-s5updates	5.6.0
ion-torrentpy	5.6.8-1
ion-torrentr	5.6.8-1
Script	2.1.42
LiveView	2334
DataCollect	3536
OIA	5603
OS	33
Graphics	89
Ion_Chef	IC.5.6.0