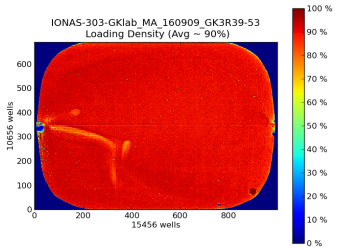
Run Summary

8.51 G Total Bases | **82** Key Signal

90% ISP Loading

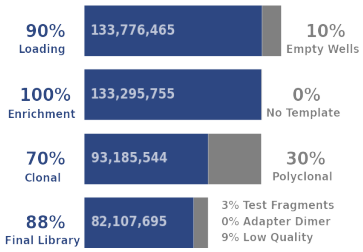
ISP Density



82,107,695 Total Reads

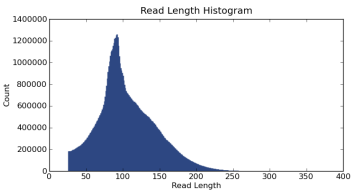
63% Usable Reads

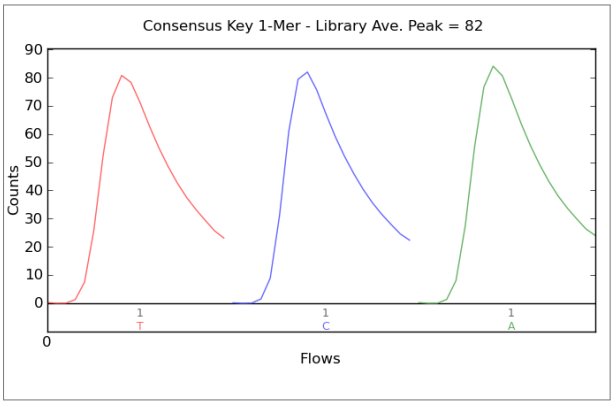
ISP Summary



104 bp Mean | **98 bp** Median | **91 bp** Mode

Read Length





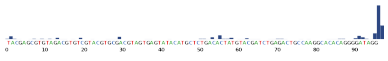
Addressable Wells	**148,155,732**	
With ISPs	133,776,465	90.3%
Live	133,295,755	99.6%
Test Fragment	3,055,122	02.3%
Library	130,240,633	97.7%

Library ISPs	**130,240,633**	
Filtered: Polyclonal	40,110,211	30.8%
Filtered: Low Quality	9,227,281	07.1%
Filtered: Adapter Dimer	88,912	00.1%
Final Library ISPs	**82,107,695**	**63.0%**

Notes: GK3R39-53_MArmaka_final15of44samples

Barcode Name	Sample	Bases	$\geq Q20$	Reads	Mean Read Length
No barcode	none	562,368,693	431,252,769	5,194,173	108 bp
IonXpress_011	none	229,447,342	180,410,037	2,122,839	108 bp
IonXpress_014	none	24,911,121	19,595,866	226,078	110 bp
IonXpress_018	GK3R39-MA30	327,826,509	256,246,085	3,214,717	102 bp
IonXpress_019	GK3R40-MA31	597,446,369	472,869,013	5,458,523	109 bp
IonXpress_020	GK3R41-MA32	696,982,834	546,543,940	6,261,520	111 bp
IonXpress_021	GK3R42-MA33	384,287,683	306,158,197	3,804,843	101 bp
IonXpress_022	GK3R43-MA34	476,051,367	375,306,675	4,508,393	106 bp
IonXpress_023	GK3R44-MA35	407,034,562	327,162,056	4,203,571	97 bp
IonXpress_024	GK3R45-MA36	548,481,394	436,355,539	5,293,911	104 bp
IonXpress_025	GK3R46-MA37	511,248,429	405,251,486	5,206,951	98 bp

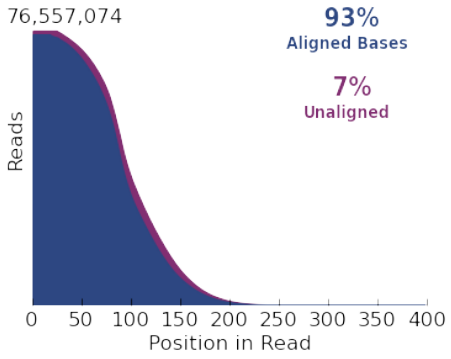
IonXpress_026	GK3R47-MA38	557,008,369	435,891,127	5,076,985	110 bp
IonXpress_027	GK3R48-MA39	254,526,442	202,264,024	2,537,384	100 bp
IonXpress_028	GK3R49-MA40	699,279,849	557,579,271	6,834,371	102 bp
IonXpress_029	GK3R50-MA41	641,530,240	500,434,611	6,017,056	107 bp
IonXpress_030	GK3R51-MA42	597,803,361	474,928,853	6,201,919	96 bp
IonXpress_031	GK3R52-MA43	465,282,120	366,444,537	4,675,735	100 bp
IonXpress_032	GK3R53-MA44	532,487,986	415,955,123	4,912,278	108 bp

Test Fragment	Reads	Percent 50AQ17	Read Length Histogram
TF_C	**2,570,574**	**79%**	

Alignment Summary *(aligned to Mus musculus 10)*

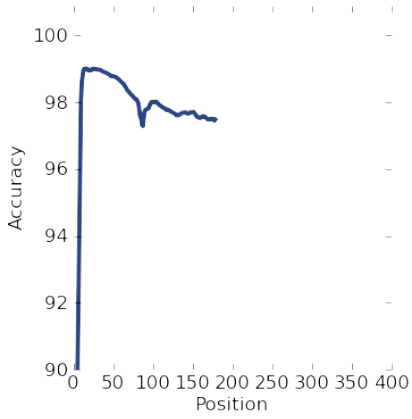
7.38 G
Total Alignment Bases

2.7X
Average Coverage Depth of Reference



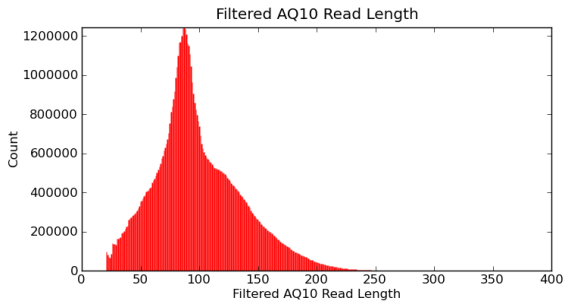
	Count	%
Total Reads	76,557,074	–
Aligned Reads	75,489,784	98.6%
Unaligned Reads	1,067,290	1.4%

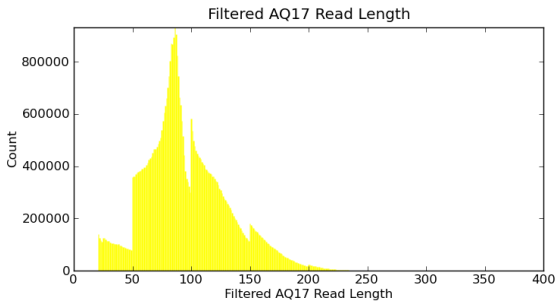
97.6%
Mean Raw Accuracy 1x

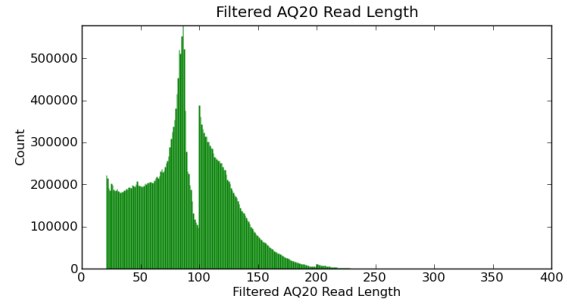


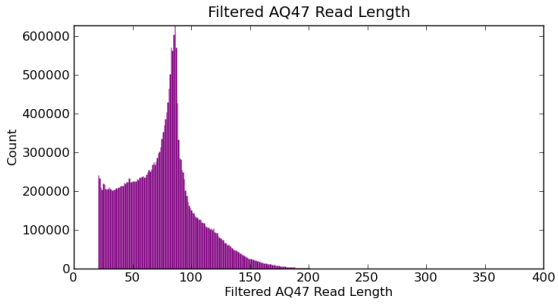
Alignment Quality

	AQ17	AQ20	Perfect
Total Number of Bases [Mbp]	4.68 G	2.73 G	1.96 G
Mean Length [bp]	95	87	74
Longest Alignment [bp]	300	284	284
Mean Coverage Depth	1.7	1.0	0.7









Analysis Details

Run Name	R_2016_09_09_12_00_04_user_IONAS-303-GKlab_MA_160909_GK3R39-53
Run Date	Sept. 9, 2016, 12:01 p.m.
Run Flows	520
Projects	LexoGen_QuantSeq , GKLab_3RNAseq
Sample	GK3R53-MA44, GK3R45-MA36, GK3R47-MA38, GK3R46-MA37, GK3R51-MA42, GK3R39-MA30, GK3R49-MA40, GK3R50-MA41, GK3R43-MA34, GK3R40-MA31, GK3R44-MA35, GK3R42-MA33, GK3R41-MA32, GK3R52-MA43, GK3R48-MA39
Reference	
Instrument	IONAS
Flow Order	TACGTACGTCTGAGCATCGATCGATGTACAGC
Library Key	TCAG
TF Key	ATCG
Chip ID	
Chip Check	Passed
Chip Type	P1.1.17
Chip Data	tiled
Barcode Set	IonXpress
Analysis Name	Auto_user_IONAS-303-GKlab_MA_160909_GK3R39-53_401
Analysis Date	Sept. 9, 2016, 7:26 p.m.
Analysis Flows	0
runID	N1ZBX
BeadFind Args	justBeadFind –beadfind-minlivesnr 3 –region-size=216,224 –total-timeout 600
Analysis Args	Analysis –from-beadfind –clonal-filter-bkgmodel true –region-size=216,224 –bkg-bfmask-update false –gpuWorkLoad 1 –total-timeout 600 –gpt /opt/ion/config/gpt$_p$1.1.17$_a$*mpliseq$_e$xome.param.json*
Pre-BaseCaller Args for calibration	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 –num-unfiltered 1000 –barcode-filter-postpone 1
Alignment Args	tmap mapall ... stage1 map4
IonStats Args	ionstats alignment
Analysis Parameters	default

Chef Summary

Ion Chef was not used for this run

Software Version

Torrent_Suite	5.0.4
host	FW7DQV1
ion-analysis	5.0.13-1
ion-chefupdates	5.0.3
ion-dbreports	5.0.33-1
ion-gpu	5.0.0-1
ion-pipeline	5.0.16-1
ion-plugins	5.0.28-1
ion-protonupdates	5.0.3
ion-torrentr	5.0.0-1
Script	2.1.33
LiveView	2045
DataCollect	3220
OIA	5002
OS	30
Graphics	52