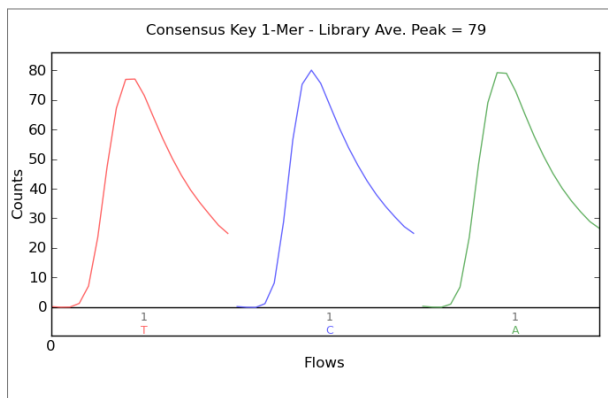
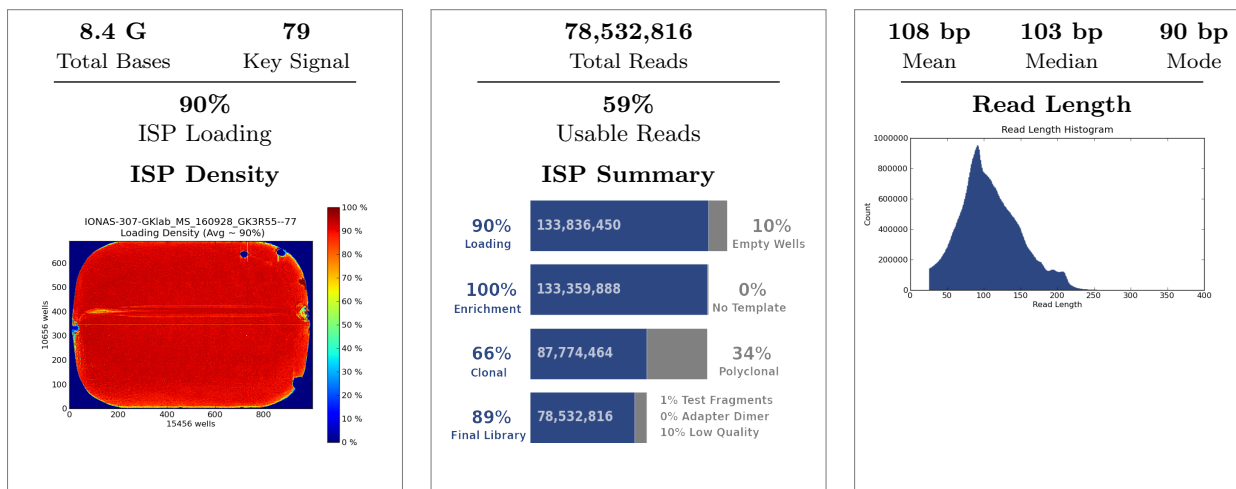


Run Summary



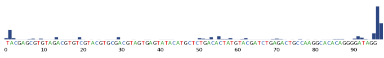
| | | |
|---------------------------|--------------------|--------------|
| Addressable Wells | 148,155,732 | |
| With ISPs | 133,836,450 | 90.3% |
| Live | 133,359,888 | 99.6% |
| Test Fragment | 1,303,422 | 01.0% |
| Library | 132,056,466 | 99.0% |
| Library ISPs | 132,056,466 | |
| Filtered: Polyclonal | 45,585,424 | 34.5% |
| Filtered: Low Quality | 8,381,156 | 06.3% |
| Filtered: Adapter Dimer | 250,883 | 00.2% |
| Final Library ISPs | 78,532,816 | 59.5% |

Notes: GK3R55-77_MSakkou_14samples_7resequenced_7newlibrary

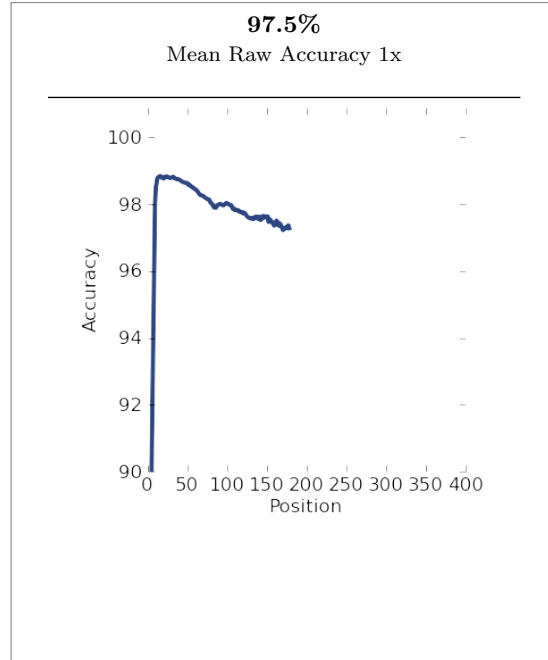
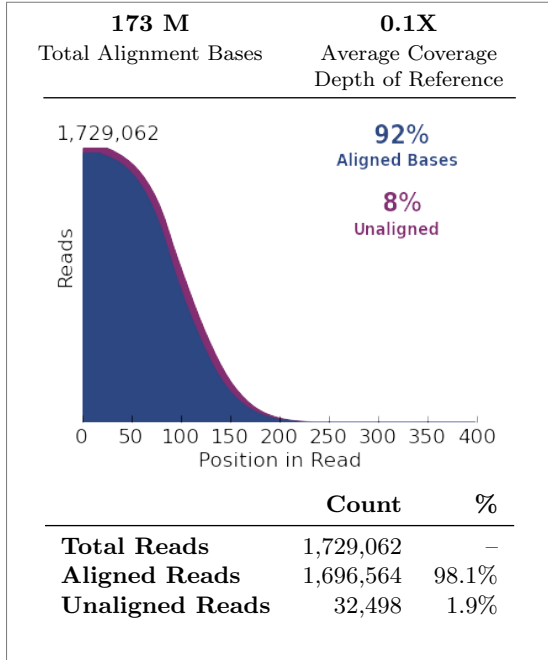
| Barcode Name | Sample | Bases | $\geq Q20$ | Reads | Mean Read Length |
|---------------|-------------|-------------|-------------|-----------|------------------|
| No barcode | none | 781,156,600 | 601,964,482 | 6,697,452 | 117 bp |
| IonXpress_001 | none | 26,079,607 | 20,138,197 | 238,595 | 109 bp |
| IonXpress_002 | GK3R55-MS2 | 260,094,020 | 201,734,085 | 2,264,554 | 115 bp |
| IonXpress_003 | none | 92,912,096 | 72,928,051 | 843,500 | 110 bp |
| IonXpress_004 | GK3R57-MS4 | 229,762,249 | 178,553,444 | 2,131,756 | 108 bp |
| IonXpress_005 | none | 38,782,046 | 30,265,217 | 359,541 | 108 bp |
| IonXpress_006 | none | 20,104,067 | 15,639,936 | 189,162 | 106 bp |
| IonXpress_007 | none | 10,703,921 | 8,362,234 | 98,264 | 109 bp |
| IonXpress_008 | GK3R61-MS8 | 251,341,082 | 194,672,981 | 2,342,241 | 107 bp |
| IonXpress_009 | GK3R62-MS9 | 173,627,365 | 133,521,825 | 1,557,759 | 111 bp |
| IonXpress_011 | GK3R64-MS11 | 201,399,069 | 156,354,615 | 1,929,222 | 104 bp |

Run Report for Auto_user_IONAS-307-GKlab_MS_160928_GK3R55-77_405

| | | | | | |
|---------------|--------------|-------------|-------------|-----------|--------|
| IonXpress_016 | GK3R69-MS16 | 167,976,816 | 128,888,691 | 1,543,001 | 109 bp |
| IonXpress_017 | GK3R70-MS18 | 234,152,039 | 178,734,161 | 2,004,509 | 117 bp |
| IonXpress_033 | GK3R65r-MS12 | 927,326,115 | 728,697,458 | 8,926,665 | 104 bp |
| IonXpress_034 | GK3R66r-MS13 | 638,861,632 | 502,980,268 | 6,034,512 | 106 bp |
| IonXpress_035 | GK3R72r-MS19 | 864,037,587 | 672,146,442 | 8,459,311 | 102 bp |
| IonXpress_036 | GK3R73r-MS20 | 916,358,120 | 713,691,433 | 8,307,388 | 110 bp |
| IonXpress_037 | GK3R74r-MS21 | 903,100,556 | 706,360,737 | 8,415,016 | 107 bp |
| IonXpress_038 | GK3R75r-MS22 | 726,421,690 | 567,852,643 | 6,799,225 | 107 bp |
| IonXpress_039 | GK3R77r-MS24 | 934,149,513 | 729,778,037 | 8,938,396 | 105 bp |

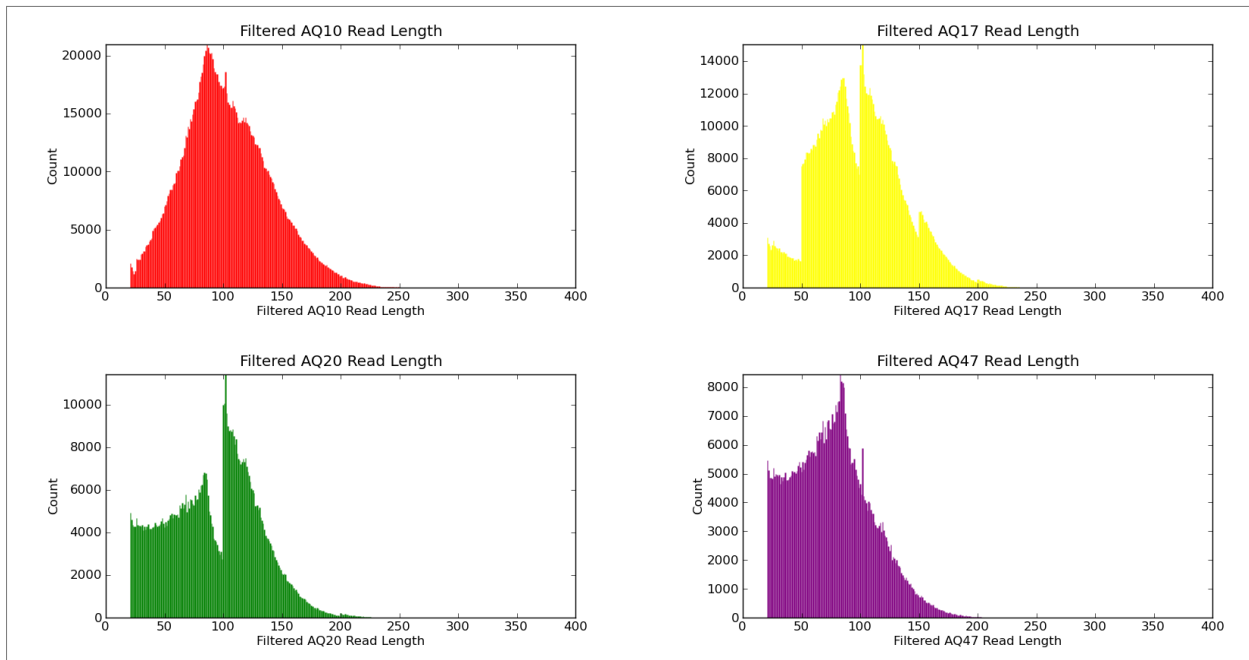
| Test Fragment | Reads | Percent 50AQ17 | Read Length Histogram |
|---------------|----------------|----------------|--|
| TF_C | 900,350 | 72% |  |

Alignment Summary (*aligned to Mus musculus 10*)



Alignment Quality

| | AQ17 | AQ20 | Perfect |
|------------------------------------|-------|--------|---------|
| Total Number of Bases [Mbp] | 108 M | 65.7 M | 45.5 M |
| Mean Length [bp] | 99 | 91 | 76 |
| Longest Alignment [bp] | 276 | 276 | 240 |
| Mean Coverage Depth | 0.0 | 0.0 | 0.0 |



Analysis Details

| | |
|--|---|
| Run Name | R_2016_09_28_11_13_05_user_IONAS-307-GKlab_MS_160928_GK3R55-77 |
| Run Date | Sept. 28, 2016, 11:14 a.m. |
| Run Flows | 520 |
| Projects | LexoGen_QuantSeq , GKLab_3RNAseq |
| Sample | GK3R55-MS2, GK3R73r-MS20, GK3R65r-MS12, GK3R70-MS18, GK3R69-MS16, GK3R61-MS8, GK3R64-MS11, GK3R72r-MS19, GK3R77r-MS24, GK3R57-MS4, GK3R75r-MS22, GK3R74r-MS21, GK3R66r-MS13, GK3R62-MS9 |
| 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-307-GKlab_MS_160928_GK3R55-77_405 |
| Analysis Date | Sept. 28, 2016, 5:33 p.m. |
| Analysis Flows | 0 |
| runID | D13ZT |
| 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 -gopt /opt/ion/config/gopt _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 |