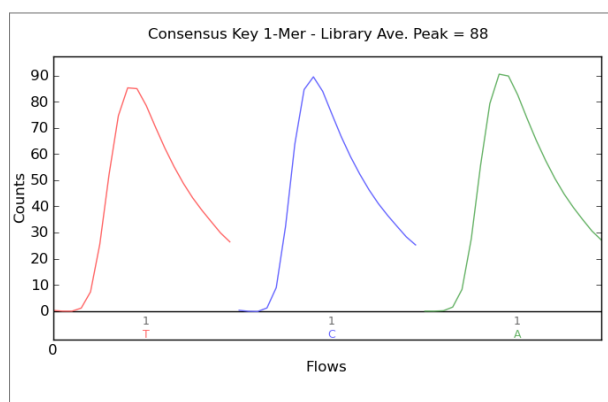
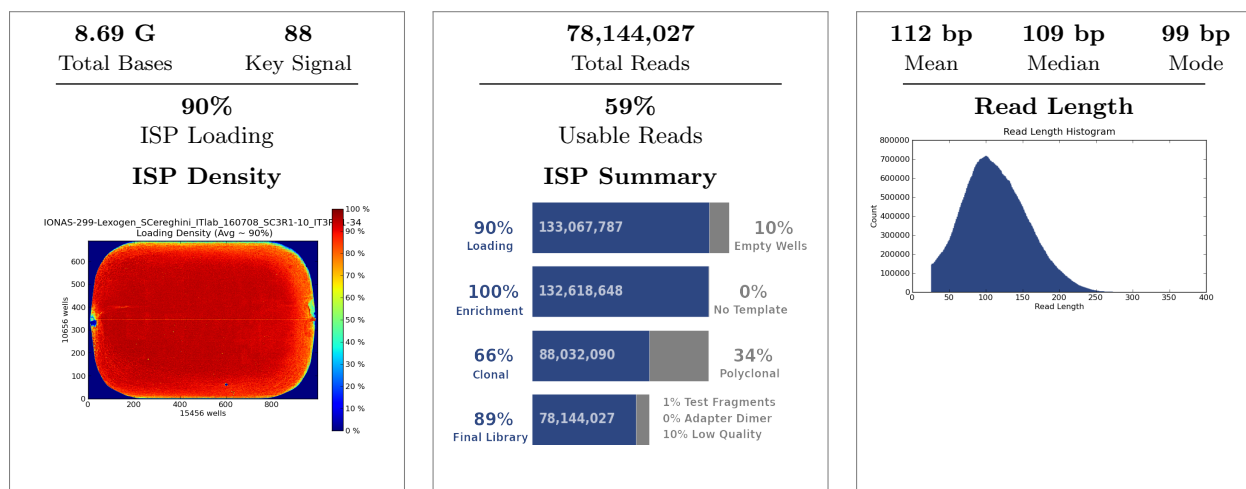


Run Summary



| | | |
|---------------------------|--------------------|--------------|
| Addressable Wells | 148,155,732 | |
| With ISPs | 133,067,787 | 89.8% |
| Live | 132,618,648 | 99.7% |
| Test Fragment | 1,138,182 | 00.9% |
| Library | 131,480,466 | 99.1% |
| Library ISPs | 131,480,466 | |
| Filtered: Polyclonal | 44,586,558 | 33.9% |
| Filtered: Low Quality | 9,511,864 | 07.2% |
| Filtered: Adapter Dimer | 191,397 | 00.1% |
| Final Library ISPs | 78,144,027 | 59.4% |

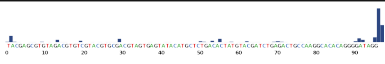
Notes: SC3RNA1-5_NP14-P7-Male_SC3RNA6-10_NP16-E165-Female_IT3R31-34_wt-ko-TCP36

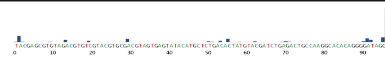
| Barcode Name | Sample | Bases | $\geq Q20$ | Reads | Mean Read Length |
|---------------|----------------|-------------|-------------|-----------|------------------|
| No barcode | none | 978,168,943 | 765,971,089 | 8,254,988 | 118 bp |
| IonXpress_001 | SC3R1-1M14 | 754,697,994 | 597,392,981 | 6,710,396 | 112 bp |
| IonXpress_002 | SC3R2-3M14 | 527,791,920 | 418,455,318 | 4,694,087 | 112 bp |
| IonXpress_003 | SC3R3-6M14mut | 496,461,424 | 396,215,004 | 4,350,420 | 114 bp |
| IonXpress_004 | SC3R4-8M14mut | 432,029,510 | 345,246,424 | 3,935,188 | 110 bp |
| IonXpress_005 | SC3R5-9M14mut | 532,860,451 | 423,487,141 | 4,735,942 | 113 bp |
| IonXpress_006 | SC3R6-1F16 | 427,300,477 | 335,264,669 | 3,658,897 | 117 bp |
| IonXpress_007 | SC3R7-6F16 | 449,601,650 | 353,769,914 | 3,813,600 | 118 bp |
| IonXpress_008 | SC3R8-2F16mut | 630,829,776 | 500,084,022 | 5,693,795 | 111 bp |
| IonXpress_009 | SC3R9-5F16mut | 513,269,492 | 408,979,910 | 4,434,506 | 116 bp |
| IonXpress_010 | SC3R10-8F16mut | 525,157,166 | 412,182,876 | 4,954,907 | 106 bp |

Run Report for
Auto_user_IONAS-299-Lexogen_SCereghini_ITlab_160708_SC3R1-10_IT3R31-34_397

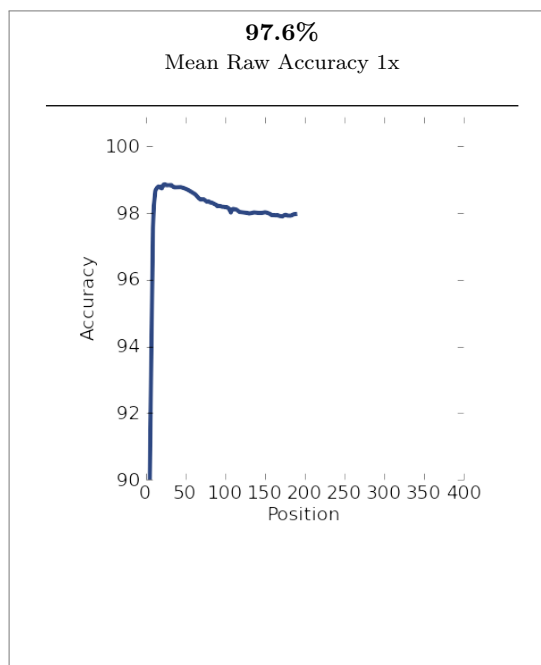
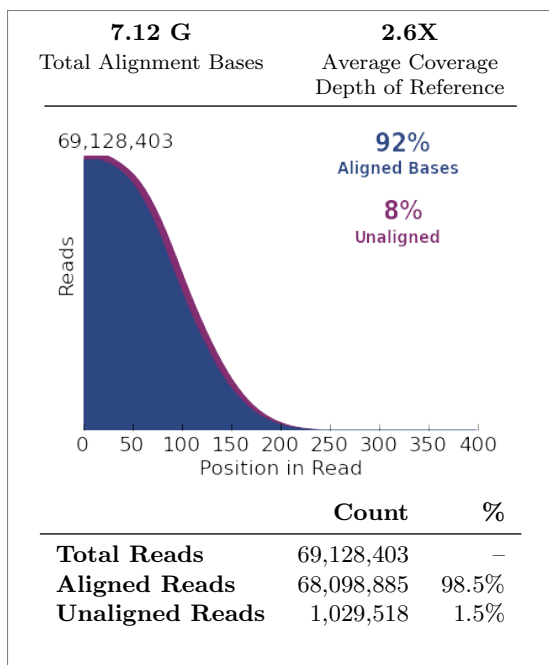
| | | | | | |
|---------------|-----------------|-------------|-------------|-----------|--------|
| IonXpress_012 | none | 10,471,187 | 8,339,041 | 88,971 | 118 bp |
| IonXpress_014 | none | 8,956,184 | 7,201,462 | 75,546 | 119 bp |
| IonXpress_015 | none | 8,566,856 | 6,845,921 | 75,895 | 113 bp |
| IonXpress_016 | none | 8,919,298 | 7,044,782 | 76,562 | 116 bp |
| IonXpress_018 | none | 12,984,808 | 10,184,445 | 114,301 | 114 bp |
| IonXpress_019 | none | 16,993,538 | 13,511,666 | 148,991 | 114 bp |
| IonXpress_022 | none | 26,277,706 | 20,790,748 | 225,185 | 117 bp |
| IonXpress_024 | none | 18,118,350 | 14,423,589 | 155,841 | 116 bp |
| IonXpress_030 | none | 10,732,845 | 8,647,247 | 99,472 | 108 bp |
| IonXpress_031 | none | 44,498,157 | 35,581,337 | 422,758 | 105 bp |
| IonXpress_032 | none | 9,898,728 | 8,045,751 | 95,185 | 104 bp |
| IonXpress_034 | none | 14,812,964 | 11,879,779 | 133,561 | 111 bp |
| IonXpress_038 | none | 8,075,075 | 6,456,284 | 73,207 | 110 bp |
| IonXpress_042 | IT3R31-wt4TCP36 | 502,152,185 | 400,207,818 | 4,619,205 | 109 bp |
| IonXpress_043 | IT3R32-wt5TCP36 | 696,614,405 | 551,167,956 | 6,275,280 | 111 bp |
| IonXpress_044 | IT3R33-ko4TCP36 | 410,296,194 | 322,771,396 | 3,670,897 | 112 bp |
| IonXpress_045 | IT3R34-ko5TCP36 | 610,935,130 | 486,008,878 | 5,795,808 | 105 bp |

| Test Fragment | Reads | Percent 50AQ17 | Read Length Histogram |
|---------------|-------|----------------|-----------------------|
|---------------|-------|----------------|-----------------------|

| | | | |
|-------------|----------------|------------|--|
| TF_C | 934,628 | 76% |  |
|-------------|----------------|------------|--|

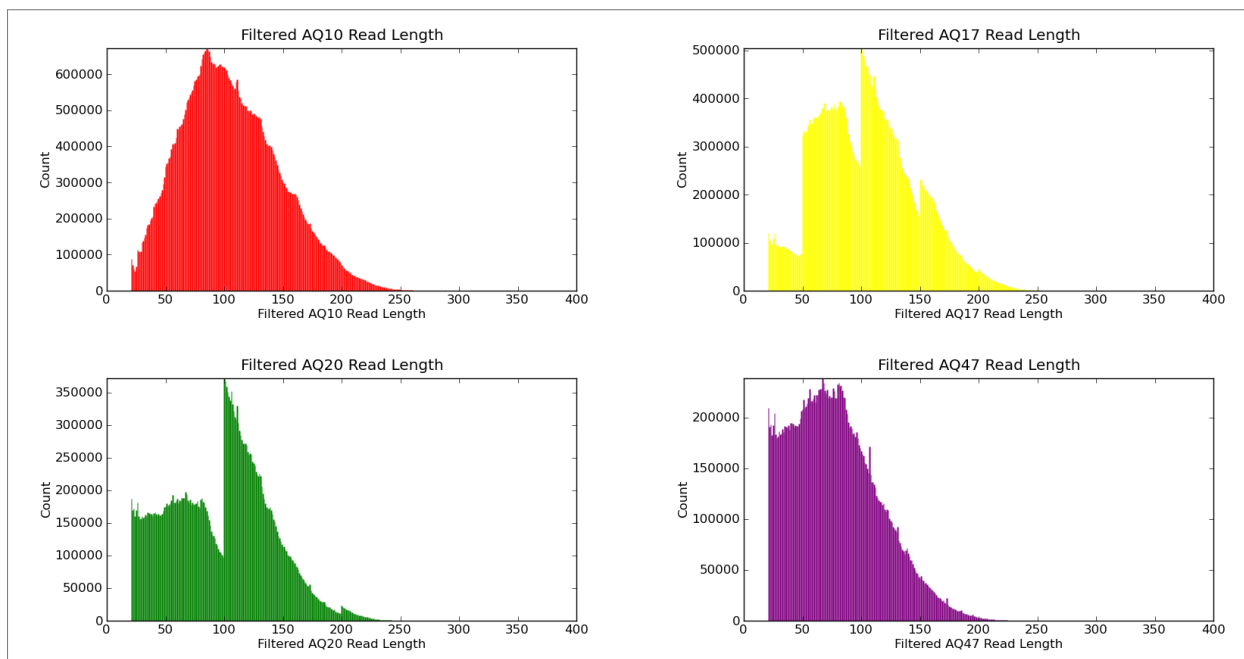


Alignment Summary (*aligned to Mus musculus 10*)



Alignment Quality

| | AQ17 | AQ20 | Perfect |
|------------------------------------|--------|--------|---------|
| Total Number of Bases [Mbp] | 4.55 G | 2.73 G | 1.75 G |
| Mean Length [bp] | 104 | 96 | 78 |
| Longest Alignment [bp] | 309 | 293 | 272 |
| Mean Coverage Depth | 1.7 | 1.0 | 0.6 |



Analysis Details

| | |
|--|---|
| Run Name | R_2016_07_08_11_26_37_user_IONAS-299-Lexogen_SCereghini_ITlab_160708_SC3R1-10_IT3R31-34 |
| Run Date | July 8, 2016, 11:28 a.m. |
| Run Flows | 520 |
| Projects | LexoGen_QuantSeq , ITLab_3RNAseq , DrCereghini_3RNAseq |
| Sample | SC3R7-6F16, SC3R4-8M14mut, SC3R3-6M14mut, SC3R1-1M14, IT3R34-ko5TCP36, SC3R8-2F16mut, SC3R10-8F16mut, SC3R9-5F16mut, IT3R31-wt4TCP36, IT3R32-wt5TCP36, SC3R6-1F16, SC3R2-3M14, SC3R5-9M14mut, IT3R33-ko4TCP36 |
| Reference | IONAS |
| Instrument | TACGTACGTCTGAGCATCGATCGATGTACAGC |
| Flow Order | TCAG |
| Library Key | ATCG |
| TF Key | |
| Chip ID | |
| Chip Check | Passed |
| Chip Type | P1.1.17 |
| Chip Data | tiled |
| Barcode Set | IonXpress |
| Analysis Name | Auto_user_IONAS-299-Lexogen_SCereghini_ITlab_160708_SC3R1-10_IT3R31-34_397 |
| Analysis Date | July 8, 2016, 6:56 p.m. |
| Analysis Flows | 0 |
| runID | XUNXG |
| 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 |