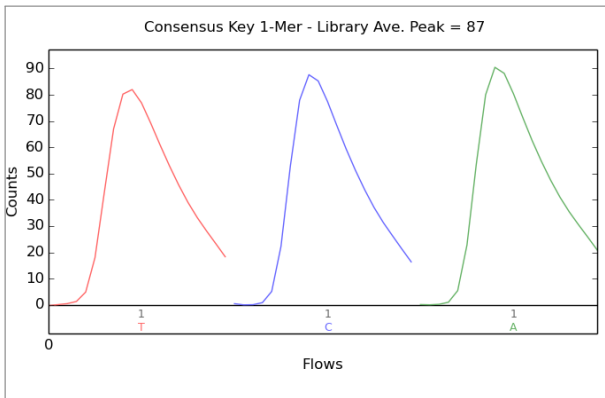
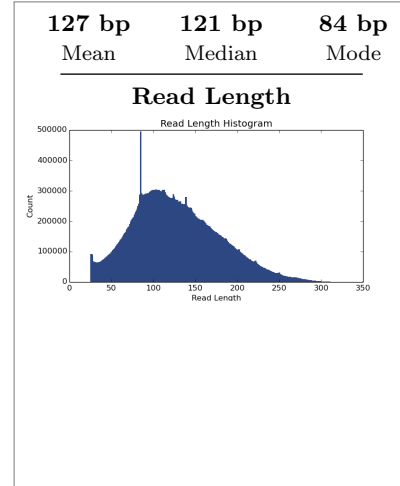
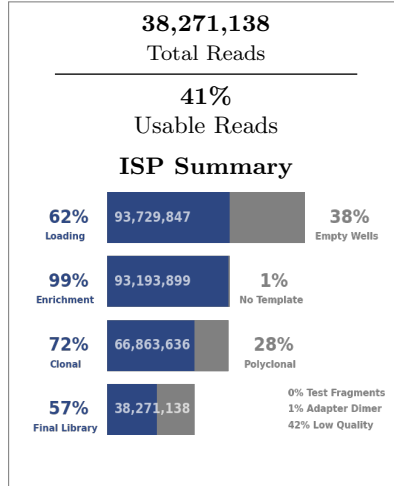
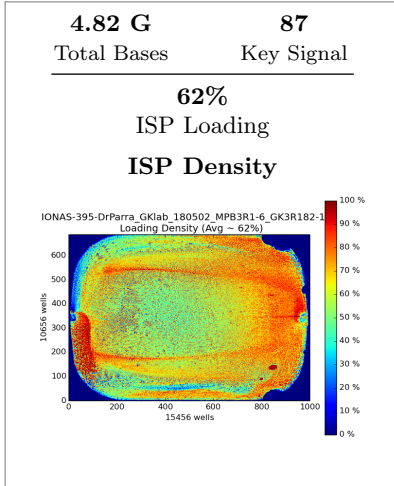


Run Summary



| Addressable Wells | 151,539,288 | |
|-------------------|-------------|-------|
| With ISPs | 93,729,847 | 61.9% |
| Live | 93,193,899 | 99.4% |
| Test Fragment | 278,352 | 00.3% |
| Library | 92,915,547 | 99.7% |

| Library ISPs | 92,915,547 | |
|---------------------------|-------------------|--------------|
| Filtered: Polyclonal | 26,330,263 | 28.3% |
| Filtered: Low Quality | 27,354,969 | 29.4% |
| Filtered: Adapter Dimer | 959,177 | 01.0% |
| Final Library ISPs | 38,271,138 | 41.2% |

Notes: DrParraBolaMaribel-6-3RNAseq.GKlab-APrado-6-3RNAseq

| Barcode Name | Sample | Bases | $\geq Q20$ | Reads | Mean Read Length | Read Length Histogram |
|---------------|--------------|-------------|-------------|-----------|------------------|-----------------------|
| No barcode | none | 490,349,026 | 401,008,532 | 3,720,521 | 131 bp | |
| IonXpress_001 | none | 32,143,405 | 28,417,036 | 223,770 | 143 bp | |
| IonXpress_002 | none | 6,781,363 | 6,006,095 | 50,497 | 134 bp | |
| IonXpress_003 | none | 15,741,203 | 13,709,000 | 122,754 | 128 bp | |
| IonXpress_004 | none | 10,791,447 | 9,208,503 | 86,340 | 124 bp | |
| IonXpress_005 | none | 7,422,776 | 6,368,973 | 58,929 | 125 bp | |
| IonXpress_007 | GK3R182-MCs1 | 389,341,137 | 324,092,481 | 3,350,879 | 116 bp | |

Run Report for Auto_user_IONAS-395-DrParra_GKlab_180502_MPB3R1-6_GK3R182-187_561

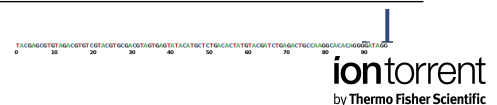
| Sample ID | Test Fragment | Reads | Percent 50AQ17 | Read Length Histogram | | |
|---------------|---------------|-------------|----------------|-----------------------|--------|--|
| IonXpress_008 | GK3R183-MCs2 | 425,043,745 | 352,057,623 | 3,397,433 | 125 bp | |
| IonXpress_009 | GK3R184-MCs3 | 562,360,366 | 469,400,582 | 4,461,573 | 126 bp | |
| IonXpress_010 | GK3R185-MCs4 | 495,462,581 | 410,346,500 | 3,851,247 | 128 bp | |
| IonXpress_011 | GK3R186-MCs5 | 297,894,558 | 247,280,701 | 2,481,722 | 120 bp | |
| IonXpress_012 | GK3R187-MCs6 | 408,973,130 | 343,326,283 | 3,322,153 | 123 bp | |
| IonXpress_013 | MPB3R1_LSKk | 230,644,498 | 189,117,894 | 1,769,241 | 130 bp | |
| IonXpress_014 | MPB3R2_LSKk | 253,706,908 | 208,126,186 | 1,850,311 | 137 bp | |
| IonXpress_015 | MPB3R3_LSKk | 304,577,492 | 300,489,133 | 2,800,895 | 130 bp | |
| IonXpress_016 | MPB3R4_LSKk | 370,291,826 | 306,927,582 | 2,857,386 | 129 bp | |
| IonXpress_017 | MPB3R5_LSKk | 161,306,870 | 158,194,456 | 1,477,889 | 129 bp | |
| IonXpress_018 | MPB3R6_LSKk | 26,864,605 | 22,100,367 | 227,149 | 118 bp | |
| IonXpress_019 | none | 14,751,928 | 12,679,058 | 126,653 | 116 bp | |
| IonXpress_020 | none | 18,519,830 | 15,985,732 | 147,152 | 125 bp | |
| IonXpress_021 | none | 14,420,909 | 12,188,645 | 113,726 | 126 bp | |
| IonXpress_022 | none | 16,851,957 | 14,312,554 | 132,289 | 127 bp | |
| IonXpress_023 | none | 15,283,198 | 12,937,532 | 122,887 | 124 bp | |
| IonXpress_024 | none | 15,591,073 | 12,999,146 | 131,668 | 118 bp | |
| IonXpress_040 | none | 73,972,909 | 62,495,950 | 581,131 | 127 bp | |
| IonXpress_042 | none | 36,978,869 | 31,630,711 | 284,278 | 130 bp | |
| IonXpress_045 | none | 11,616,676 | 9,912,142 | 108,386 | 107 bp | |
| IonXpress_047 | none | 16,621,217 | 14,138,384 | 137,880 | 120 bp | |
| IonXpress_048 | none | 8,914,500 | 7,710,426 | 74,321 | 119 bp | |

Test Fragment Reads Percent 50AQ17 Read Length Histogram

TF_C

159,322

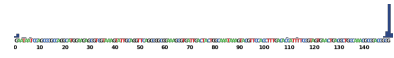
94



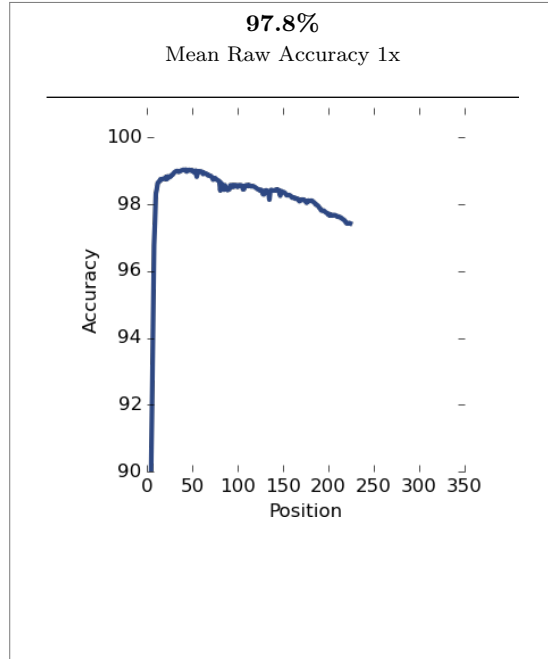
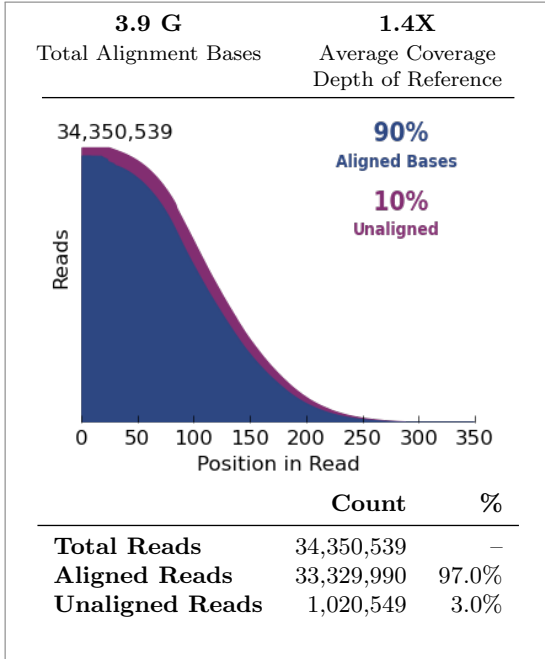
TF_1

86,939

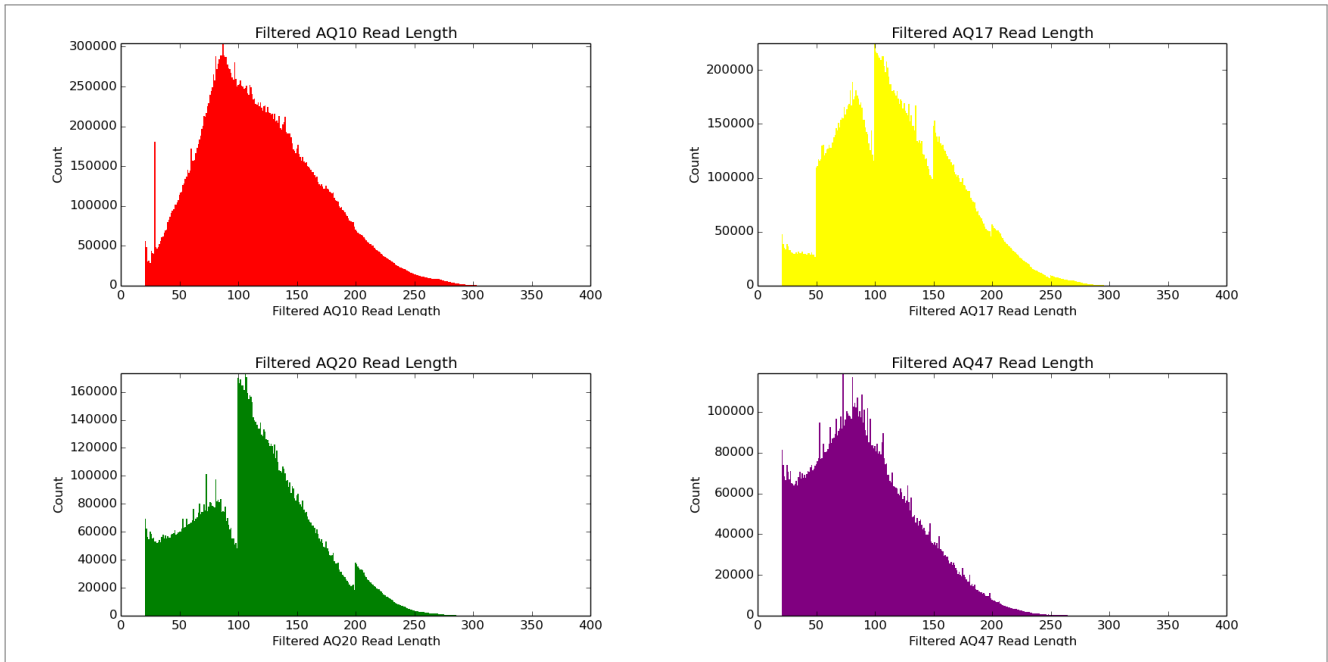
86



Alignment Summary *(aligned to Mus musculus 10)*



| | Alignment Quality | | |
|-----------------------------|-------------------|--------|---------|
| | AQ17 | AQ20 | Perfect |
| Total Number of Bases [Mbp] | 2.75 G | 1.72 G | 991 M |
| Mean Length [bp] | 120 | 114 | 91 |
| Longest Alignment [bp] | 333 | 325 | 312 |
| Mean Coverage Depth | 1.0 | 0.6 | 0.4 |



Analysis Details

| | |
|----------------------------|--|
| Run Name | R_2018.05.03_10.45.27_user_IONAS-395-DrParra_GKlab_180502_MPB3R1-6_GK3R182-187 |
| Run Date | May 3, 2018, 10:46 a.m. |
| Run Flows | 500 |
| Projects | GKLab_3RNAseq , DrParra-Bola_3RNAseq |
| Sample | MPB3R2_LSKko1, GK3R183-MCs2, MPB3R1_LSKwt1, MPB3R5_LSKwt6, MPB3R6_LSKko6, GK3R182-MCs1, GK3R186-MCs5, MPB3R3_LSKwt4, GK3R185-MCs4, MPB3R4_LSKko4, GK3R184-MCs3, GK3R187-MCs6 |
| Reference | |
| Instrument | IONAS |
| Operation Mode | Service mode |
| Flow Order | TACGTACGTCTGAGCATCGATCGATGTACAGC |
| Library Key | TCAG |
| TF Key | ATCG |
| Chip Barcode | DADD09966 |
| Chip Check | Passed |
| Chip Type | P1.1.17 |
| Chip Data | tiled |
| Chip Lot Number | QPK643 |
| Chip Wafer | 13 |
| Barcode Set | IonXpress |
| Analysis Name | Auto_user_IONAS-395-DrParra_GKlab_180502_MPB3R1-6_GK3R182-187_561 |
| Analysis Date | May 3, 2018, 7:08 p.m. |
| Analysis Flows | 0 |
| runID | CE46M |
| 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 | May 3, 2018, 10:32 a.m. |
| Chef Instrument Name | CHEF00509 |
| Chef Operation Mode | Customer Mode |
| Sample Position | 2 |
| Tip Rack Barcode | 4560900CB |
| Chip Type 1 | P1v3 |
| Chip Type 2 | P1v3 |
| Chip Expiration 1 | Apr2018 |
| Chip Expiration 2 | Apr2018 |
| Templating Kit Type | Ion PI Hi-Q Chef Kit |
| Reagent Expiration | 160831 |
| Reagent Lot Number | 1703710 |
| 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 | May 2, 2018, 4:49 p.m. |
| Completion Time | May 3, 2018, 10:32 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 |