AS22012Ion_V2_RBC1_BC2_rawlib.ba secaller

Overall QC Status: PASS Sample QC Status: PASS Fusion QC Status: PASS Variations QC Status: PASS

Job: 20220415_AS22012_1 [4728]

Type: RNA FusionRNA SNP/InDel Targeted Mutations: Archer Comprehensive Targets NIH v1.3.1 2 Include Non-Targeted

Variants: No

Software Version: Suite_Analysis_v6.2.7

Analysis Date: 14-Apr-2022 22:58
Report Creator: mpvghtpe@gmail.com

Report Date: 19-Jun-2023 3:29



Statistics

Molecular Barcode Statistics

| Total Fragments | Fragments with Complete Adapter | Number of Reads After Trimming Adapters |
|-----------------|---------------------------------|--|
| 3,500,000 | 3,036,881 | 2,843,285 |

Read Statistics

| Туре | Total Fragments (# / %) | Mapped (# / %) | Pass Alignment Filter (%) | On Target (%) |
|------------------|-------------------------|-------------------|------------------------------|---------------|
| All Fragments | 2,825,629 / 100.0 | 2,825,629 / 100.0 | 100.0 | 97.9 |
| Unique Fragments | 321,744 / 11.4 | 321,744 / 100.0 | 100.0 | 97.7 |

DNA/RNA Statistics

| Туре | DNA Reads (# / %) | RNA Reads (# / %) | Ambiguous Reads (# / %) |
|--|-------------------|--------------------|-------------------------|
| All Fragments | 202,737.0 / 7.3 | 1,999,668.0 / 72.3 | 565,050.0 / 20.4 |
| Molecular Bins | 29,000.0 / 9.2 | 195,598.0 / 62.3 | 89,573.0 / 28.5 |
| Average Molecular Bins per GSP2 | 49.4 | 333.22 | 152.59 |
| Unique Start Sites | 11,171.0 / 25.7 | 27,121.0 / 62.5 | 13,207.0 / 30.4 |
| Average Unique Start Sites per GSP2 | 19.74 | 60.92 | 26.13 |
| Average Unique Start Sites per GSP2 Control | 24.58 | 151.0 | 44.0 |

QC Statistics

| Avg. Unique DNA And Ambiguous Start Sites Per GSP2 | Avg. Unique RNA Start Sites Per GSP2 Control |
|--|--|
| 45.52 | 151.0 |

Miscellaneous Statistics

| On Target Deduplication Ratio |
|-------------------------------|
| 8.81:1 |

DNA/RNA Fragment Lengths

| DNA Median Fragment Length | DNA Mean Fragment Length | RNA Median Fragment Length | RNA Mean Fragment Length |
|----------------------------|--------------------------|----------------------------|--------------------------|
| 107.0 | 117.1 | 119.0 | 123.1 |

Reportable Variants

None Found

Reportable Isoforms

☑ Passed all strong-evidence filters

♣ Likely off-target mispriming event

© Exact breakpoint known

☎ Cross contamination

✗ User-annotated false positive

■ Known fusion partners in Archer Quiver™

☐ Percent GSP2 reads below threshold

 $\Delta \hat{}$ Fusion expression imbalance

1 Low confidence

 $\ensuremath{\bigtriangleup}$ User-annotated true positive

% Intronic fusion

↓ Not enough unique start sites

O Transcriptional readthrough event

☐ Known ensembl paralogue

| Fusion: TFE3 → PRCC | | | |
|---|-----------------------------|---|--|
| Filters: ☑ ⊚ | Reads : 987 (64.09%) | <u>Segments</u> | |
| GSP2: TFE3_chrX_48896661_20A1_GSP2 | Start Sites: 141 | chrX:48896692→48896632 TFE3(-) NM_006521.5, exon:3 | |
| Mutation Classification: Undefined | | chr1:156752074→156752121 | |
| Is Artifact: no | | PRCC(+) NM_005973.4, exon:2 | |

| Fusion: PRCC $ ightarrow$ TFE3 | | | |
|--|---------------------|---|--|
| Filters: ☑ ⊚ | Reads: 288 (34.87%) | <u>Segments</u> | |
| GSP2: TFE3_chrX_48895940_21_+_A1_GSP2 | Start Sites: 87 | chr1:156737854→156738031 PRCC(+) NM_005973.4, exon:1 | |
| Mutation Classification: Undefined | | chrX:48895967→48895810 | |
| Is Artifact: no | | TFE3(-) NM_006521.5, exon:4 | |

| Fusion: TFE3 → PRCC | | | |
|---|--------------------------|---|--|
| Filters: 🛢 🛱 | Reads : 6 (0.42%) | <u>Segments</u> | |
| GSP2: TFE3_chrX_48896661_20A1_GSP2 | Start Sites: 5 | chrX:48896681→48896632 TFE3(-) NM_006521.5, exon:3 | |
| Mutation Classification: Undefined | | chr1:156752119→156752121 | |
| Is Artifact: no | | PRCC(+) NM_005973.4, exon:2 | |