AL23002_5504712_Ion_V2_RBC2_BC34_rawlib.basecaller

Overall QC Status: PASS
Sample QC Status: PASS
Fusion QC Status: PASS
Variations QC Status: PASS
Job: 20230330_AL23002 [3453]
Type: RNA FusionRNA SNP/InDel Targeted Mutations: Archer Comprehensive Targets NIH v1.3.1 Include Non-Targeted Variants: No
Software Version: Suite_Analysis_v6.2.7
Analysis Date: 29-Mar-2023 20:15
Report Creator: mpvghtpe@gmail.com
Report Date: 29-Mar-2023 22:01

Statistics

Molecular Barcode Statistics

Total Fragments	Fragments with Complete Adapter	Number of Reads After Trimming Adapters
1,038,846	964,579	913,504

Read Statistics

Type	Total Fragments (# / %)	Mapped (# / %)	Pass Alignment Filter (%)	On Target (%)
All Fragments	909,738 / 100.0	909,738 / 100.0	100.0	96.3
Unique Fragments	241,182 / 26.5	241,182 / 100.0	100.0	97.3

DNA/RNA Statistics

Type	DNA Reads (# / %)	RNA Reads (# / %)	Ambiguous Reads (# / %)
All Fragments	36,704.0 / 4.2	738,550.0 / 84.3	100,560.0 / 11.5
Molecular Bins	12,501.0 / 5.3	180,698.0 / 77.0	41,473.0 / 17.7
Average Molecular Bins per GSP2	76.69	1,108.58	254.44
Unique Start Sites	5,920.0 / 25.9	15,176.0 / 66.5	5,792.0 / 25.4
Average Unique Start Sites per GSP2	36.93	125.23	37.79
Average Unique Start Sites per GSP2 Control	41.12	207.62	84.38

QC Statistics

Avg. Unique DNA And Ambiguous Start Sites Per GSP2	Avg. Unique RNA Start Sites Per GSP2 Control
73.7	207.62

Miscellaneous Statistics

On Target Deduplication Ratio
3.73:1

DNA/RNA Fragment Lengths

DNA Median Fragment Length	DNA Mean Fragment Length	RNA Median Fragment Length	RNA Mean Fragment Length
138.0	147.4	145.0	150.6

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
- Fusion expression imbalance
- Low confidence
- User-annotated true positive
- Intronic fusion
- Not enough unique start sites
- Transcriptional readthrough event
- Known ensembl paralogue

Fusion: TPM3 → NTRK1		
Filters: ☑ ◎ **GSP2:** NTRK1_chr1_156844367_21_-_A1_GSP 2 **Mutation Classification:** Undefined **Is Artifact:** no	**Reads**: 2022 (86.23%) **Start Sites:** 219	**Segments** chr1:154142945→154142876 TPM3(-) NM_153649.3, exon:7 chr1:156844363→156844418 NTRK1(+) NM_002529.3, exon:10

Fusion: TPM3 → NTRK1		
Filters: ☑ ⛁ **GSP2:** NTRK1_chr1_156844367_21_-_A1_GSP 2 **Mutation Classification:** Undefined **Is Artifact:** no	**Reads**: 34 (97.14%) **Start Sites:** 26	**Segments** chr1:154142875→154142819 TPM3(-) NM_152263.3, intron:8 chr1:156844312→156844362 NTRK1(+) NM_002529.3, intron:9

Fusion: TPM3 → NTRK1		
Filters: ⛁ ⚟ **GSP2:** NTRK1_chr1_156845331_19_-_A1_GSP 2 **Mutation Classification:** Undefined **Is Artifact:** no	**Reads**: 16 (0.74%) **Start Sites:** 11	**Segments** chr1:154142944→154142876 TPM3(-) NM_152263.3, exon:8 chr1:156844363→156844418 NTRK1(+) NM_002529.3, exon:10