



Overall QC Status: PASS  
Sample QC Status: PASS  
Fusion QC Status: PASS  
Variations QC Status: PASS  
Job: 20230202\_AS23004-05 [3450]  
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: 02-Feb-2023 6:41  
Report Creator: mpvghtpe@gmail.com  
Report Date: 19-Jun-2023 2:46

## Statistics

### Molecular Barcode Statistics

Total Fragments	Fragments with Complete Adapter	Number of Reads After Trimming Adapters
3,500,000	3,298,214	3,117,584

### Read Statistics

Type	Total Fragments (# / %)	Mapped (# / %)	Pass Alignment Filter (%)	On Target (%)
All Fragments	3,103,635 / 100.0	3,103,635 / 100.0	100.0	98.1
Unique Fragments	694,015 / 22.4	694,015 / 100.0	100.0	98.8

### DNA/RNA Statistics

Type	DNA Reads (# / %)	RNA Reads (# / %)	Ambiguous Reads (# / %)
All Fragments	255,277.0 / 8.4	2,323,371.0 / 76.3	464,827.0 / 15.3
Molecular Bins	69,770.0 / 10.2	453,005.0 / 66.1	162,656.0 / 23.7
Average Molecular Bins per GSP2	64.24	417.13	149.78
Unique Start Sites	26,083.0 / 27.8	57,702.0 / 61.4	23,135.0 / 24.6
Average Unique Start Sites per GSP2	24.99	69.1	24.31
Average Unique Start Sites per GSP2 Control	30.0	155.33	25.92

QC Statistics

Avg. Unique DNA And Ambiguous Start Sites Per GSP2	Avg. Unique RNA Start Sites Per GSP2 Control
48.9	155.33

Miscellaneous Statistics

On Target Deduplication Ratio
4.44:1

DNA/RNA Fragment Lengths

DNA Median Fragment Length	DNA Mean Fragment Length	RNA Median Fragment Length	RNA Mean Fragment Length
130.0	142.3	131.0	140.1

**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

Fusion expression imbalance

Low confidence

User-annotated true positive
- Intronic fusion

Not enough unique start sites

Transcriptional readthrough event

Known ensembl paralogue

Fusion: EWSR1 → FLI1		
<div>Filters:  </div> <div>GSP2: EWSR1_chr22_29683087_28+_A1_GSP 2</div> <div>Mutation Classification: Undefined</div> <div>Is Artifact: no</div>	<div>Reads: 540 (12.74%)</div> <div>Start Sites: 103</div>	<div>Segments</div> <div>chr22:29682912→29683123 EWSR1(+) NM_005243.3, exon:7</div> <div>chr11:128651853→128651918 FLI1(+) NM_002017.4, exon:5</div>

Fusion: EWSR1 → FLI1		
<div>Filters:  </div> <div>GSP2: EWSR1_chr22_29683087_28+_A1_GSP 2</div> <div>Mutation Classification: Undefined</div> <div>Is Artifact: no</div>	<div>Reads: 60 (98.36%)</div> <div>Start Sites: 34</div>	<div>Segments</div> <div>chr22:29683124→29683179 EWSR1(+) NM_005243.3, intron:7</div> <div>chr11:128643911→128644115 FLI1(+) NM_002017.4, intron:4</div>

Fusion: EWSR1 → FLI1		
<div>Filters:  </div> <div>GSP2: EWSR1_chr22_29683087_28+_A1_GSP 2</div> <div>Mutation Classification: Undefined</div> <div>Is Artifact: no</div>	<div>Reads: 5 (0.12%)</div> <div>Start Sites: 4</div>	<div>Segments</div> <div>chr22:29683091→29683122 EWSR1(+) NM_005243.3, exon:7</div> <div>chr11:128651853→128651883 FLI1(+) NM_002017.4, exon:5</div>