



**Overall QC Status:** PASS  
**Sample QC Status:** PASS  
**Fusion QC Status:** PASS  
**Variations QC Status:** PASS  
**Job:** 20221020\_AS22031 [4746]  
**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:** 20-Oct-2022 2:47  
**Report Creator:** mpvghtpe@gmail.com  
**Report Date:** 20-Jun-2023 20:53

## Statistics

### Molecular Barcode Statistics

Total Fragments	Fragments with Complete Adapter	Number of Reads After Trimming Adapters
3,048,605	2,840,979	2,630,521

### Read Statistics

Type	Total Fragments (# / %)	Mapped (# / %)	Pass Alignment Filter (%)	On Target (%)
All Fragments	2,615,179 / 100.0	2,615,179 / 100.0	100.0	98.6
Unique Fragments	599,360 / 22.9	599,360 / 100.0	100.0	98.8

### DNA/RNA Statistics

Type	DNA Reads (# / %)	RNA Reads (# / %)	Ambiguous Reads (# / %)
All Fragments	280,265.0 / 10.9	1,952,554.0 / 75.7	346,553.0 / 13.4
Molecular Bins	76,161.0 / 12.9	397,355.0 / 67.1	118,863.0 / 20.1
Average Molecular Bins per GSP2	115.57	602.97	180.37
Unique Start Sites	24,219.0 / 33.7	42,413.0 / 59.1	17,109.0 / 23.8
Average Unique Start Sites per GSP2	39.17	88.52	30.14
Average Unique Start Sites per GSP2 Control	35.67	150.33	24.75

QC Statistics

Avg. Unique DNA And Ambiguous Start Sites Per GSP2	Avg. Unique RNA Start Sites Per GSP2 Control
68.28	150.33

Miscellaneous Statistics

On Target Deduplication Ratio
4.35:1

DNA/RNA Fragment Lengths

DNA Median Fragment Length	DNA Mean Fragment Length	RNA Median Fragment Length	RNA Mean Fragment Length
131.0	144.3	130.0	137.2

**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: 387 (13.19%)</div> <div>Start Sites: 75</div>	<div>Segments</div> <div>chr22:29682923→29683123 EWSR1(+) NM_005243.3, exon:7</div> <div>chr11:128675261→128675326 FLI1(+) NM_002017.4, exon:6</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: 11 (0.38%)</div> <div>Start Sites: 10</div>	<div>Segments</div> <div>chr22:29683088→29683123 EWSR1(+) NM_005243.3, exon:7</div> <div>chr11:128677075→128677124 FLI1(+) NM_002017.4, exon:7</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: 7 (0.24%)</div> <div>Start Sites: 5</div>	<div>Segments</div> <div>chr22:29683088→29683123 EWSR1(+) NM_005243.3, exon:7</div> <div>chr11:128661632→128661736 FLI1(+) NM_002017.4, intron:5</div>