## AS23028\_20665570\_Ion\_V2\_RBC2\_BC2 6\_rawlib.basecaller

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

Job: 20230615\_AS23026\_28 [3477]

**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:** 15-Jun-2023 4:11

Report Creator: mpvghtpe@gmail.com

Report Date: 15-Jun-2023 18:51



#### **Statistics**

#### **Molecular Barcode Statistics**

Total Fragments	Fragments with Complete Adapter	Number of Reads After Trimming Adapters
3,500,000	3,289,194	3,101,316

#### **Read Statistics**

Туре	Total Fragments (# / %)	Mapped (# / %)	Pass Alignment Filter (%)	On Target (%)
All Fragments	3,083,952 / 100.0	3,083,952 / 100.0	100.0	98.5
Unique Fragments	634,351 / 20.6	634,351 / 100.0	100.0	98.9

### **DNA/RNA Statistics**

Туре	DNA Reads (# / %)	RNA Reads (# / %)	Ambiguous Reads (# / %)
All Fragments	249,581.0 / 8.2	2,257,438.0 / 74.3	529,750.0 / 17.4
Molecular Bins	62,216.0 / 9.9	419,324.0 / 66.9	145,588.0 / 23.2
Average Molecular Bins per GSP2	57.29	386.12	134.06
Unique Start Sites	28,050.0 / 27.8	60,855.0 / 60.3	25,556.0 / 25.3
Average Unique Start Sites per GSP2	26.53	72.41	26.96
Average Unique Start Sites per GSP2 Control	38.75	175.58	33.83

### **QC Statistics**

Avg. Unique DNA And Ambiguous Start Sites Per GSP2	Avg. Unique RNA Start Sites Per GSP2 Control
53.18	175.58

#### **Miscellaneous Statistics**

О	On Target Deduplication Ratio
	4.84:1

## **DNA/RNA Fragment Lengths**

DNA Median Fragment Length	DNA Mean Fragment Length	RNA Median Fragment Length	RNA Mean Fragment Length
128.0	139.0	130.0	137.0

# **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

% Intronic fusion

**↓** F Not enough unique start sites

O Transcriptional readthrough event

☐ Known ensembl paralogue

Fusion: EWSR1 → NR4A3		
Filters: ☑ ⊚	<b>Reads</b> : 965 (24.44%)	<u>Segments</u>
<b>GSP2:</b> NR4A3_chr9_102587978_20A1_GSP 2	Start Sites: 234	chr22:29682913→29683123 EWSR1(+) NM_005243.3, exon:7
Mutation Classification: Undefined		chr9:102587941→102588114
Is Artifact: no		NR4A3(+) NM_006981.3, exon:2

Fusion: EWSR1 → NR4A3		
Filters: ⊜ ‡	Reads: 11 (0.28%)	<u>Segments</u>
<b>GSP2:</b> EWSR1_chr22_29683087_28_+_A1_GSP 2	Start Sites: 8	chr22:29683088→29683123 EWSR1(+) NM_005243.3, exon:7
Mutation Classification: Undefined		chr9:102587944→102588088
Is Artifact: no		NR4A3(+) NM_006981.3, exon:2