# AS23024\_11962564\_Ion\_V2\_RBC2\_BC4 7 rawlib.basecaller

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

**Job:** 23230608\_AS23024\_AS23021-1 [3474]

**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: 08-Jun-2023 3:03
Report Creator: mpvghtpe@gmail.com

Report Date: 08-Jun-2023 19:24



#### **Statistics**

### **Molecular Barcode Statistics**

Total Fragments	Fragments with Complete Adapter	Number of Reads After Trimming Adapters
3,500,000	3,273,561	3,096,923

#### **Read Statistics**

Туре	Total Fragments (# / %)	Mapped (# / %)	Pass Alignment Filter (%)	On Target (%)
All Fragments	3,083,656 / 100.0	3,083,656 / 100.0	100.0	99.1
Unique Fragments	127,055 / 4.1	127,055 / 100.0	100.0	98.4

#### **DNA/RNA Statistics**

Туре	DNA Reads (# / %)	RNA Reads (# / %)	Ambiguous Reads (# / %)
All Fragments	358,533.0 / 11.7	2,207,547.0 / 72.2	490,394.0 / 16.0
Molecular Bins	14,675.0 / 11.7	75,741.0 / 60.6	34,545.0 / 27.6
Average Molecular Bins per GSP2	22.27	114.93	52.42
Unique Start Sites	6,519.0 / 23.4	17,307.0 / 62.0	6,899.0 / 24.7
Average Unique Start Sites per GSP2	10.13	30.62	11.52
Average Unique Start Sites per GSP2 Control	9.92	71.58	7.42

## **QC Statistics**

Avg. Unique DNA And Ambiguous Start Sites Per GSP2	Avg. Unique RNA Start Sites Per GSP2 Control
21.62	71.58

## **Miscellaneous Statistics**

On Target Deduplication Ratio	
24.46:1	

# **DNA/RNA Fragment Lengths**

DNA Median Fragment Length	DNA Mean Fragment Length	RNA Median Fragment Length	RNA Mean Fragment Length
95.0	105.8	101.0	107.8

# **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

1 Low confidence

 $\triangle$  User-annotated true positive

% Intronic fusion

**↓** F Not enough unique start sites

O Transcriptional readthrough event

☐ Known ensembl paralogue

Fusion: TPM3 → NTRK1		
Filters: ☑ ⊚	Reads: 312 (58.21%)	<u>Segments</u>
<b>GSP2:</b> NTRK1_chr1_156844367_21A1_GSP 2	Start Sites: 81	chr1:154142945→154142876 TPM3(-) NM_153649.3, exon:7
Mutation Classification: Undefined		chr1:156844363→156844418
Is Artifact: no		NTRK1(+) NM_002529.3, exon:10

Fusion: TPM3 → NTRK1			
Filters: 🛢 🛱	<b>Reads</b> : 40 (8.03%)	<u>Segments</u>	
<b>GSP2:</b> NTRK1_chr1_156844367_21A1_GSP 2	Start Sites: 20	chr1:154141859→154141781 TPM3(-) NM_152263.3, exon:9	
Mutation Classification: Undefined		chr1:156844363→156844418	
Is Artifact: no		NTRK1(+) NM_002529.3, exon:10	