## AL23006\_49341993\_lon\_V2\_RBC2\_BC2 9\_rawlib.basecaller

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

**Job:** 20231005\_AL23006\_F23071 [3502]

**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:** 05-Oct-2023 0:29

Report Creator: mpvghtpe@gmail.com

Report Date: 05-Oct-2023 2:37



#### **Molecular Barcode Statistics**

| Total Fragments | Fragments with Complete Adapter | Number of Reads After Trimming<br>Adapters |
|-----------------|---------------------------------|--|
| 3,120,090       | 2,936,304                       | 2,796,573                                  |

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#### **Read Statistics**

| Туре             | Total Fragments (# / %) | Mapped (# / %)    | Pass Alignment Filter<br>(%) | On Target (%) |
|------------------|-------------------------|-------------------|------------------------------|---------------|
| All Fragments    | 2,788,191 / 100.0       | 2,788,191 / 100.0 | 100.0                        | 97.8          |
| Unique Fragments | 348,729 / 12.5          | 348,729 / 100.0   | 100.0                        | 97.7          |

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

| Туре  | DNA Reads (# / %) | RNA Reads (# / %)  | Ambiguous Reads (# / %) |
|---|-------------------|--------------------|-------------------------|
| All Fragments                               | 194,223.0 / 7.1   | 2,193,102.0 / 80.4 | 340,422.0 / 12.5        |
| Molecular Bins                              | 29,640.0 / 8.7    | 244,076.0 / 71.7   | 66,842.0 / 19.6         |
| Average Molecular Bins per<br>GSP2          | 181.84            | 1,497.4            | 410.07                  |
| Unique Start Sites                          | 7,630.0 / 32.5    | 14,485.0 / 61.8    | 5,959.0 / 25.4          |
| Average Unique Start Sites per GSP2         | 48.5              | 117.61             | 39.93                   |
| Average Unique Start Sites per GSP2 Control | 59.12             | 240.0              | 97.25                   |

### **QC Statistics**

| Avg. Unique DNA And Ambiguous Start Sites Per GSP2 | Avg. Unique RNA Start Sites Per GSP2 Control |  |
|--|--|--|
| 87.33  | 240.0  |  |

### **Miscellaneous Statistics**

| On Target Deduplication Ratio |
|-------------------------------|
| 8.01:1                        |

## **DNA/RNA Fragment Lengths**

| DNA Median Fragment Length | DNA Mean Fragment Length | RNA Median Fragment Length | RNA Mean Fragment Length |
|----------------------------|--------------------------|----------------------------|--------------------------|
| 132.0                      | 142.3                    | 132.0                      | 139.2                    |

# **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

ঐ॒॔ Fusion expression imbalance

1 Low confidence

 $\triangle$  User-annotated true positive

% Intronic fusion

↓ Not enough unique start sites

O Transcriptional readthrough event

☐ Known ensembl paralogue

| Fusion: GOPC → ROS1                           |                     |   |  |
|---|---------------------|---|--|
| Filters: ☑ ⊚                                  | Reads: 428 (88.61%) | <u>Segments</u>   |  |
| <b>GSP2:</b> ROS1_chr6_117642501_21_+_A1_GSP2 | Start Sites: 79     | chr6:117888197→117888017<br>GOPC(-) NM_020399.3, exon:8 |  |
| Mutation Classification: Undefined            |                     | chr6:117642557 → 117642422                              |  |
| Is Artifact: no                               |                     | ROS1(-) NM_002944.2, exon:35                            |  |