# AS22021\_lon\_V2\_RBC2\_BC31\_rawlib.basecaller

Overall QC Status: PASS Sample QC Status: PASS Fusion QC Status: PASS Variations QC Status: PASS Job: 20220630 AS22021 [3444]

**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: 30-Jun-2022 5:29
Report Creator: mpvghtpe@gmail.com

Report Date: 19-Jun-2023 2:36



#### **Statistics**

#### **Molecular Barcode Statistics**

Total Fragments	Fragments with Complete Adapter	Number of Reads After Trimming Adapters
2,561,842	2,401,208	2,211,826

#### **Read Statistics**

Туре	Total Fragments (# / %)	Mapped (# / %)	Pass Alignment Filter (%)	On Target (%)
All Fragments	2,202,923 / 100.0	2,202,923 / 100.0	100.0	98.3
Unique Fragments	447,482 / 20.3	447,482 / 100.0	100.0	98.5

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

Туре	DNA Reads (# / %)	RNA Reads (# / %)	Ambiguous Reads (# / %)
All Fragments	173,095.0 / 8.0	1,744,597.0 / 80.6	247,523.0 / 11.4
Molecular Bins	46,660.0 / 10.6	310,659.0 / 70.5	83,530.0 / 18.9
Average Molecular Bins per GSP2	79.49	529.23	142.3
Unique Start Sites	15,738.0 / 30.3	31,832.0 / 61.2	12,995.0 / 25.0
Average Unique Start Sites per GSP2	28.0	75.38	25.39
Average Unique Start Sites per GSP2 Control	26.5	176.58	30.0

#### **QC Statistics**

Avg. Unique DNA And Ambiguous Start Sites Per GSP2	Avg. Unique RNA Start Sites Per GSP2 Control
52.74	176.58

#### **Miscellaneous Statistics**

On Target Deduplication Ratio
4.91:1

#### **DNA/RNA Fragment Lengths**

DNA Median Fragment Length	DNA Mean Fragment Length	RNA Median Fragment Length	RNA Mean Fragment Length
130.0	144.3	130.0	138.0

## **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

△ Fusion expression imbalance

1 Low confidence

 $\ensuremath{\bigtriangleup}$  User-annotated true positive

% Intronic fusion

↓ F Not enough unique start sites

O Transcriptional readthrough event

☐ Known ensembl paralogue

Fusion: CIC → DUX4		
Filters: ☑ 🛢	<b>Reads</b> : 335 (47.12%)	<u>Segments</u>
<b>GSP2:</b> CIC_chr19_42797344_20_+_A1_GSP2	Start Sites: 150	chr19:42797345→42797433 CIC(+) NM_015125.4, exon:15
Mutation Classification: Undefined		chr4:191006661→191006848
Is Artifact: no		DUX4(+) NM_033178.4, exon:1

Fusion: CIC → DUX4		
Filters: 🛢 ‡	<b>Reads</b> : 12 (3.81%)	<u>Segments</u>
<b>GSP2:</b> CIC_chr19_42797344_20_+_A1_GSP2	Start Sites: 8	chr19:42797744→42797744 CIC(+) NM_015125.4, exon:16
Mutation Classification: Undefined		chr4:191006667→191006846
Is Artifact: no		DUX4(+) NM_033178.4, exon:1