



**Overall QC Status:** PASS  
**Sample QC Status:** PASS  
**Variations QC Status:** PASS  
**Anomaly QC Status:** PASS

**Job:**

**Type:** DNA Structural VariationDNA CNVDNA SNP/InDel  
 Detection: Somatic Mutation Targeted Mutations: Archer  
 Comprehensive Targets

**Software Version:**

**Analysis Date:**

**Report Creator**

**Report Date:**

## Statistics

### Molecular Barcode Statistics

Total Fragments	Fragments with Complete Adapter	Number of Reads After Trimming Adapters
8,000,000	7,598,193	5,964,669

### Read Statistics

Type	Total Fragments (# / %)	Mapped (# / %)	Pass Alignment Filter (%)	On Target (%)
All Fragments	5,964,669 / 100.0	5,964,213 / 100.0	100.0	98.6
Unique Fragments	2,983,000 / 50.0	2,982,625 / 100.0	100.0	97.5

### DNA/RNA Statistics

Type	DNA Reads (# / %)	RNA Reads (# / %)	Ambiguous Reads (# / %)
All Fragments	5,878,351.0 / 100.0	0.0 / 0.0	0.0 / 0.0
Molecular Bins	2,907,501.0 / 100.0	0.0 / 0.0	0.0 / 0.0
Average Molecular Bins per GSP2	3,887.03	0.0	0.0
Unique Start Sites	178,000.0 / 100.0	0.0 / 0.0	0.0 / 0.0
Average Unique Start Sites per GSP2	382.32	0.0	0.0
Average Unique Start Sites per GSP2 Control	0.0	0.0	0.0

## QC Statistics

Avg. Unique DNA And Ambiguous Start Sites Per GSP2
382.32

## Miscellaneous Statistics

On Target Deduplication Ratio
2.02:1

## DNA/RNA Fragment Lengths

DNA Median Fragment Length	DNA Mean Fragment Length	RNA Median Fragment Length	RNA Mean Fragment Length
153.0	166.2	No Fragments	No Fragments

## Reportable Variants

NP_056153.2:p.Gly646T rpfTer12	
<b>Gene:</b> ASXL1 <b>Ref./ Mutation:</b> A / AG (. PRESENT) <b>Allele Fraction:</b> 0.0344 <b>Mutation Classification:</b> Undefined <b>Is Artifact:</b> no	<b>Location:</b> chr20:31022441 <b>Depth:</b> 7466 <b>HGVSp:</b> NP_056153.2
EZH2	
<b>Gene:</b> EZH2 <b>Ref./ Mutation:</b> TAA / T (.) <b>Allele Fraction:</b> 0.0503 <b>Mutation Classification:</b> Undefined <b>Is Artifact:</b> no	<b>Location:</b> chr7:148543693 <b>Depth:</b> 4497 <b>Clinical Sig.</b> Likely benign <b>Disease:</b> Weaver_syndrome
NP_001745.2:p.Ser424A Ia	
<b>Gene:</b> RUNX1 <b>Ref./ Mutation:</b> A / C (.) <b>Allele Fraction:</b> 0.0446 <b>Mutation Classification:</b> Undefined <b>Is Artifact:</b> no	<b>Location:</b> chr21:36164605 <b>Depth:</b> 2131 <b>HGVSp:</b> NP_001745.2 <b>Sift:</b> deleterious(0) <b>PolyPhen:</b> possibly_damaging(0.453)
NP_000537.3:p.Arg248T rp	
<b>Gene:</b> TP53 <b>Ref./ Mutation:</b> G / A (. PRESENT) <b>Allele Fraction:</b> 0.2017 <b>Mutation Classification:</b> Undefined <b>Is Artifact:</b> no	<b>Location:</b> chr17:7577539 <b>Depth:</b> 5841 <b>Clinical Sig.</b> Pathogenic <b>Disease:</b> Li-Fraumeni_syndrome_1 <b>HGVSp:</b> NP_000537.3 <b>Sift:</b> deleterious(0) <b>PolyPhen:</b> probably_damaging(1)

## Reportable CNVs

*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

## DNA Structural Variation: FLT3

<p><b>Filters:</b> <input checked="" type="checkbox"/></p> <p><b>GSP2:</b> FLT3_chr13_28608285_27_-_A1_GSP2</p> <p><b>Mutation Classification:</b> Undefined</p> <p><b>Is Artifact:</b> no</p>	<p><b>Reads:</b> 9266 (70.54%)</p> <p><b>Start Sites:</b> 513</p>	<p style="text-align: center;"><u>Segments</u></p> <p style="text-align: center;">chr13:28608351→28608255 FLT3(-) NM_004119.2, exon:14</p> <p style="text-align: center;">chr13:28608284→28608219 FLT3(-) NM_004119.2, exon:14</p>
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