

## Variant Caller Benchmark Test

### Variant Count:

	Output from FreeBayes or HaplotypeCaller	Output from HaploPrep	
	vcf and annovar.txt	InformativeSNPs.txt and MpileupOutput.txt	InformativeSNPs.vcf and MpileupInformativeSNPInput.txt
FreeBayes	39268	16752	15384
HaplotypeCaller	35619	16937	15520

  

*Variants removed  
with Filter 1  
FreeBayes: 22516  
HaplotypeCaller: 18682*

*Variants removed  
with Filter 2  
FreeBayes: 1368  
HaplotypeCaller: 1417*

**Filter 1:** Filters for SNPs with a population allele frequency  $\geq 1\%$  in the 1000 Genomes database and read allele frequency between 30-70% (heterozygous).

**Filter 2:** Filters SNPs based on actual read data; filters for variants with read allele frequency between 40-60% and read depth  $\geq 10$ .

### InformativeSNPs.vcf comparison:

	Total SNPs Found	Duplicates	Duplicates Removed	Overlapping SNPs	Unique SNPs	% Overlap	% Unique
FreeBayes	15384	17	15367	15176	191	<b>98.76%</b>	<b>1.24%</b>
HaplotypeCaller	15520	0	15520	15176	344	<b>97.78%</b>	<b>2.22%</b>