# MAGeCK Count Report

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### 1 Summary

The statistics of comparisons are listed in Table 1 and Table 2. The corresponding fastq files in each row are listed in Table 3.

	Label	Reads	Mapped	Percentage
1	$test1\_fastq\_gz$	2500	1453	0.58
2	$test2\_fastq\_gz$	2500	1471	0.59

Table 1: Summary of comparisons

	Label	TotalsgRNA	ZeroCounts	GiniIndex
1	$test1\_fastq\_gz$	2550	1276	0.53
2	$test2\_fastq\_gz$	2550	1199	0.49

Table 2: Summary of comparisons

	File	Label
1	input_0.gz	test1_fastq_gz
2	$input\_1.gz$	$test2\_fastq\_gz$

Table 3: Summary of samples

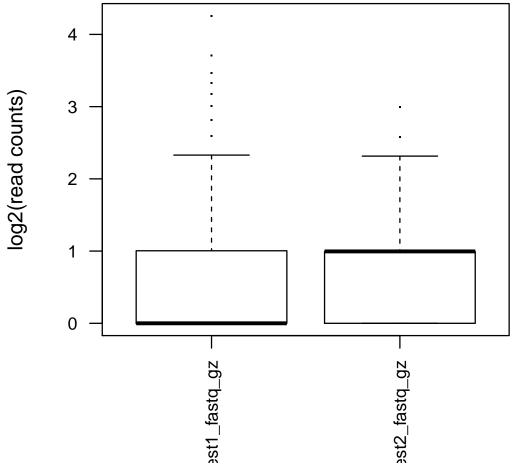
The meanings of the columns are as follows.

- Row: The row number in the table;
- File: The filename of fastq file;

- Label: Assigned label;
- Reads: The total read count in the fastq file;
- Mapped: Reads that can be mapped to gRNA library;
- **Percentage**: The percentage of mapped reads;
- TotalsgRNAs: The number of sgRNAs in the library;
- **ZeroCounts**: The number of sgRNA with 0 read counts;
- GiniIndex: The Gini Index of the read count distribution. Gini index can be used to measure the evenness of the read counts, and a smaller value means a more even distribution of the read counts.

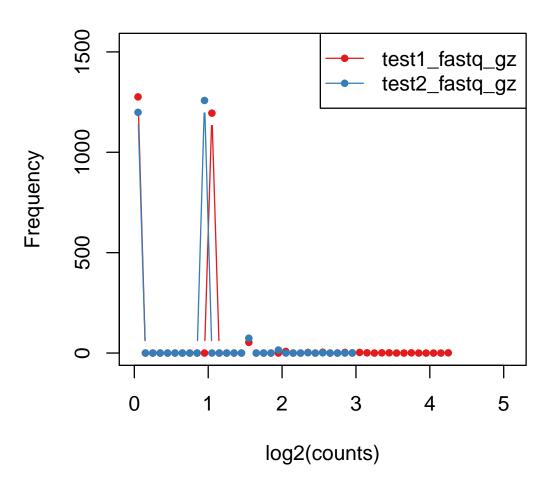
### 2 Normalized read count distribution of all samples

The following figure shows the distribution of median-normalized read counts in all samples.



The following figure shows the histogram of median-normalized read counts in all samples.

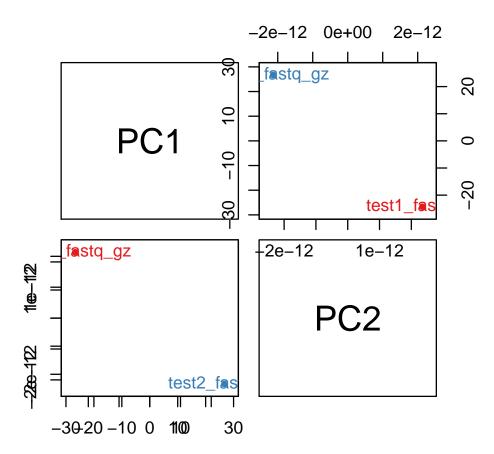
# **Distribution of read counts**

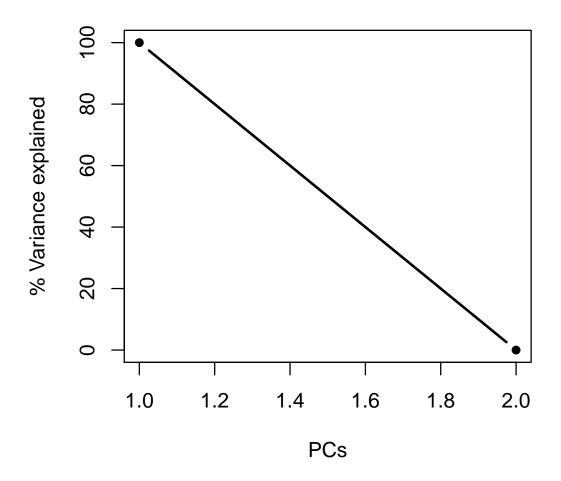


### 3 Principle Component Analysis

The following figure shows the first 2 principle components (PCs) from the Principle Component Analysis (PCA), and the percentage of variances explained by the top PCs.

# First 2 principle components





## 4 Sample clustering

The following figure shows the sample clustering result.

