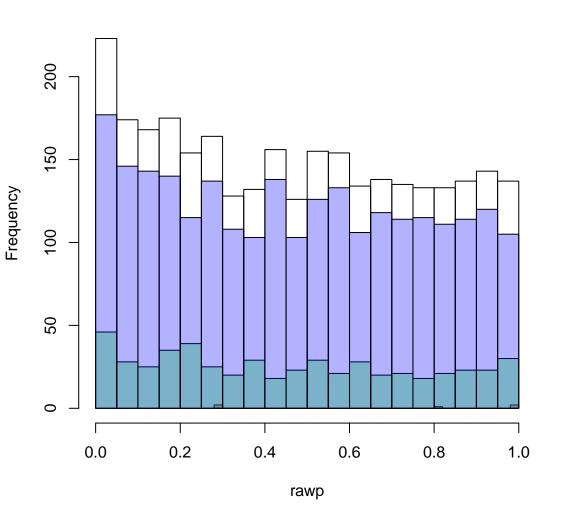
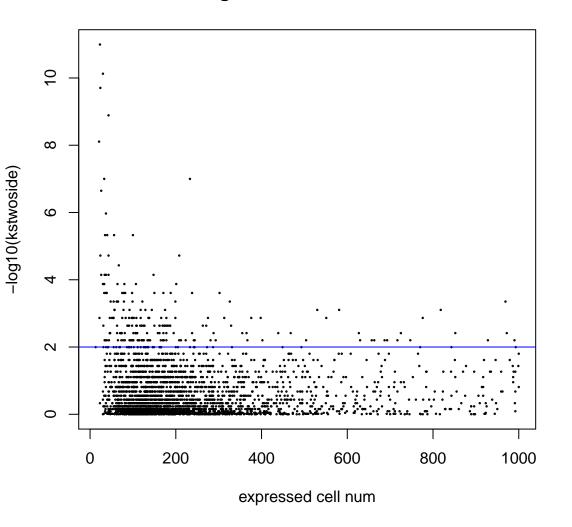


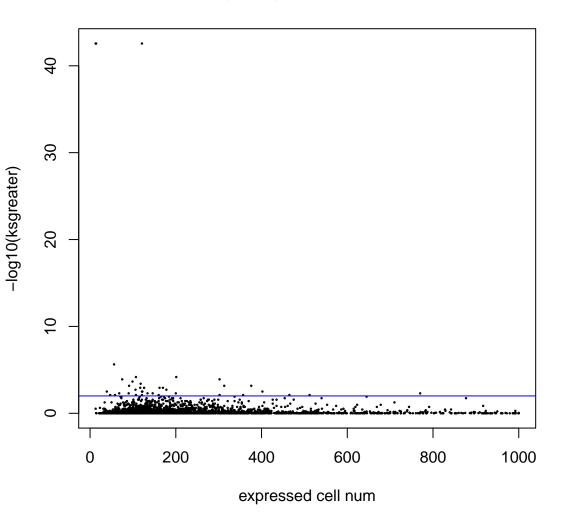
# perm pvalues



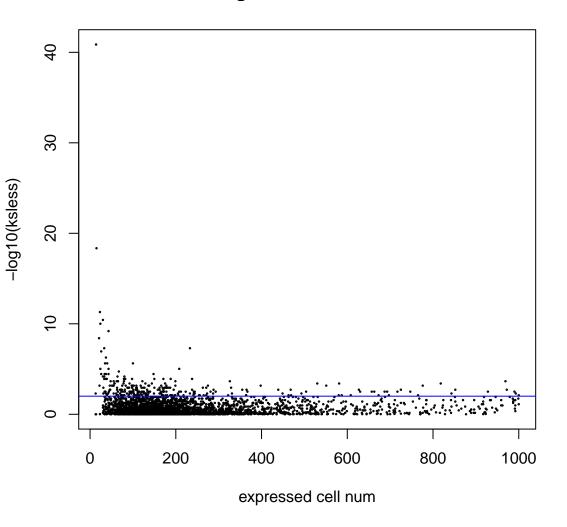
sig\_KStwoside: 6.636%



sig\_KSgreater: 1.267%



sig\_KSless: 8.736%



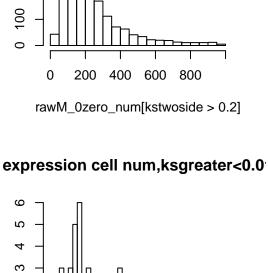
Frequency

Trequency

Frequency

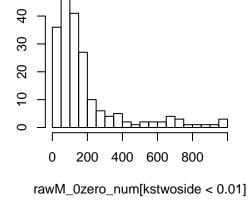
Frequency

The property of th

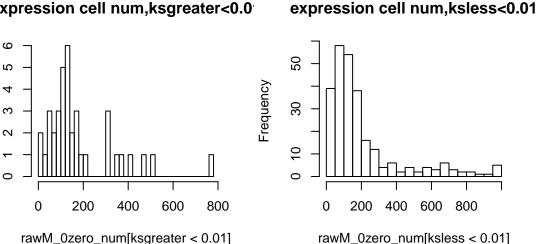


Frequency

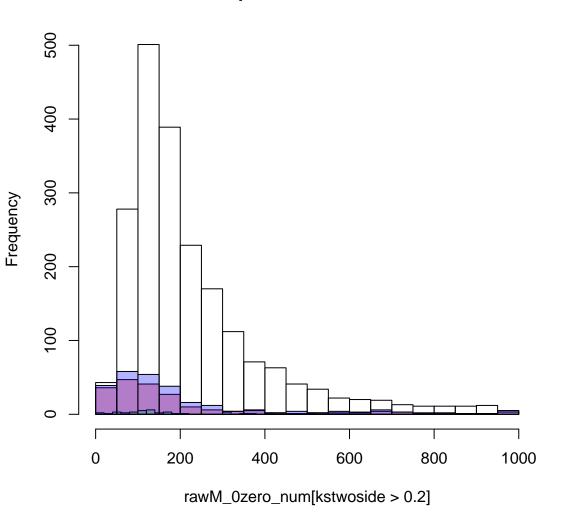
expression cell num,kstwoside>0.2



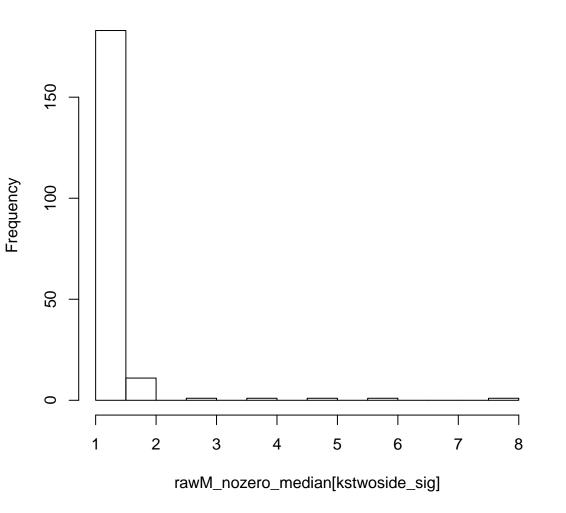
expression cell num,kstwoside<0.0



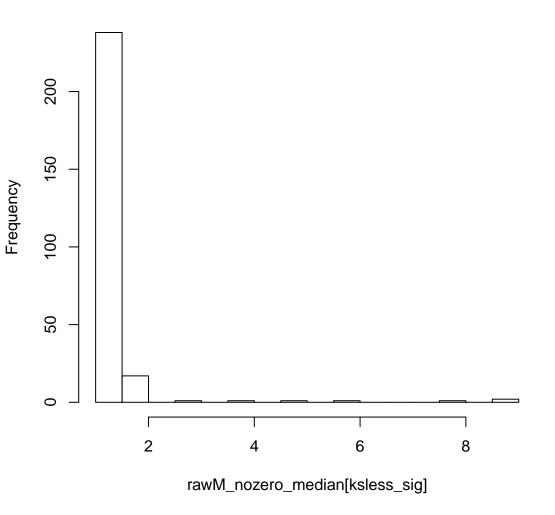
## expression cell num



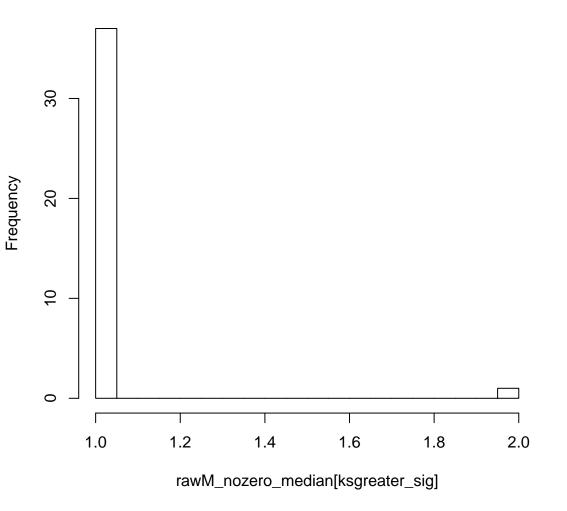
#### median of nozero log-expres of genes, kstwoside sig



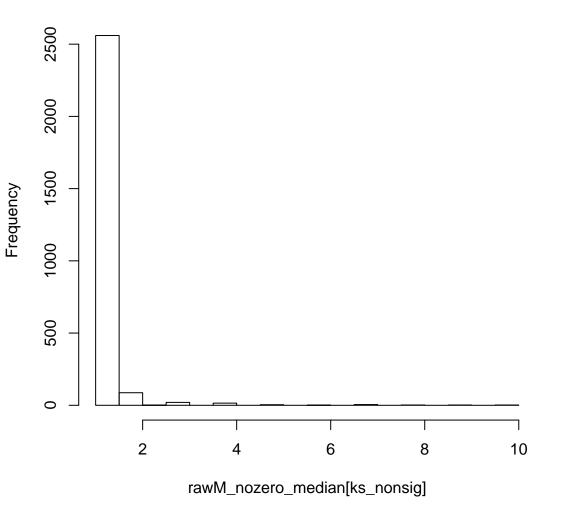
#### median of nozero log-expres of genes, ksless sig



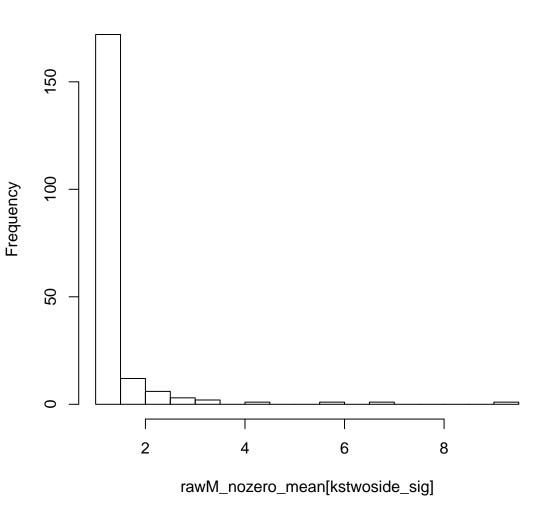
# median of nozero log-expres of genes,ksgreater sig



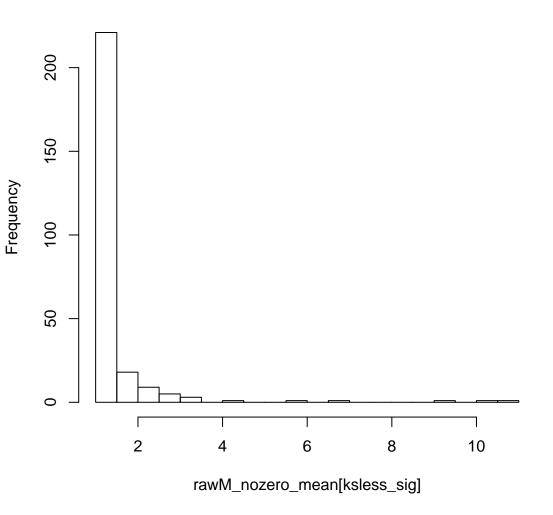
# median of nozero log-expres of genes,ks no sig



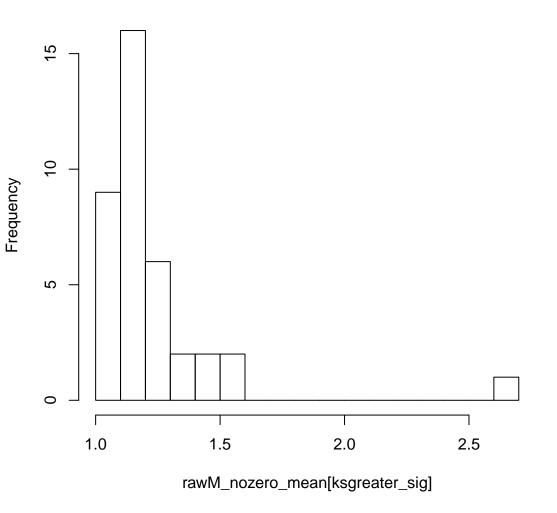
#### mean of nozero log-expres of genes, kstwoside sig



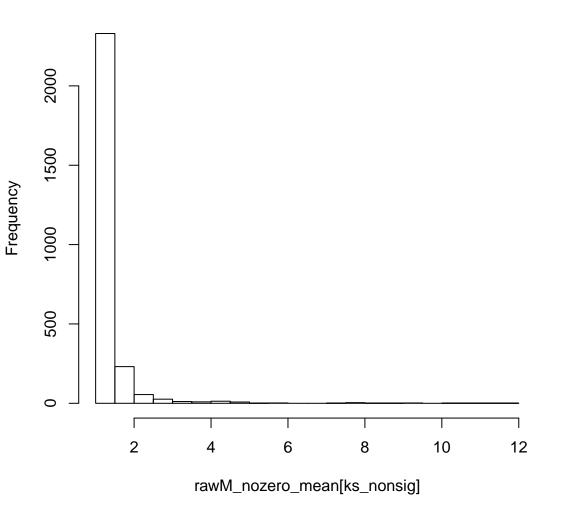
#### mean of nozero log-expres of genes, ksless sig



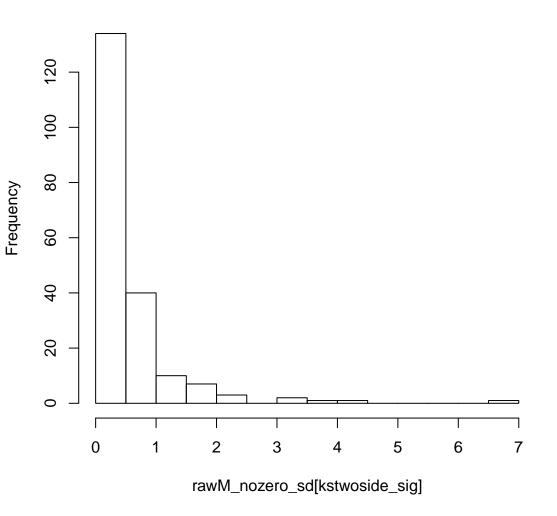
#### mean of nozero log-expres of genes,ksgreater sig



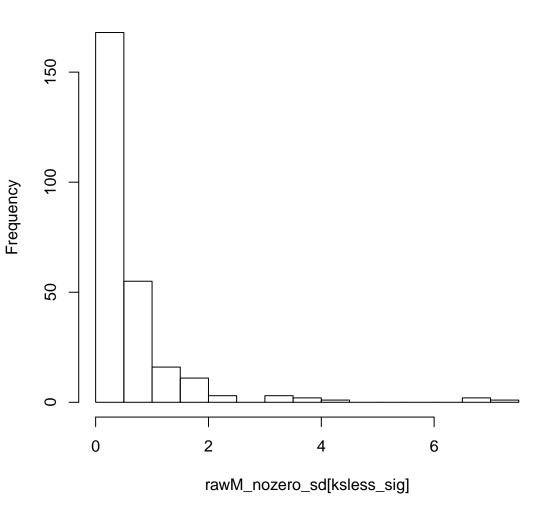
#### mean of nozero log-expres of genes,ks no sig



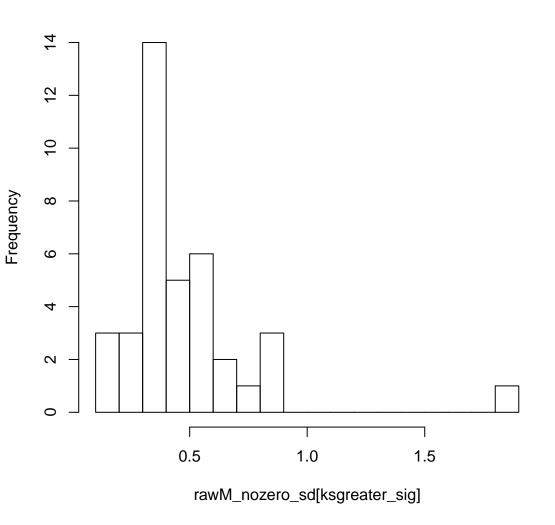
#### sd of nozero log-expres of genes, kstwoside sig



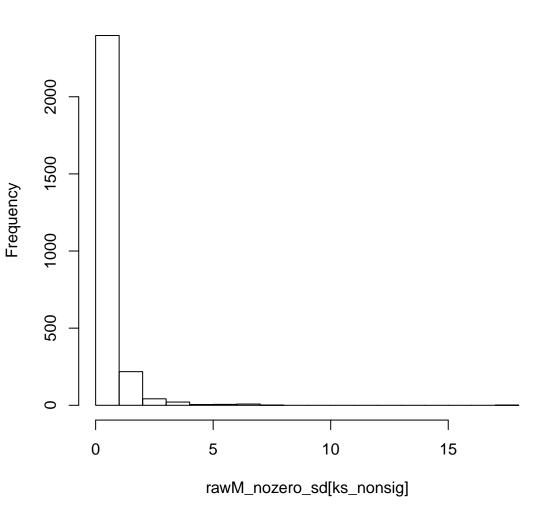
## sd of nozero log-expres of genes, ksless sig



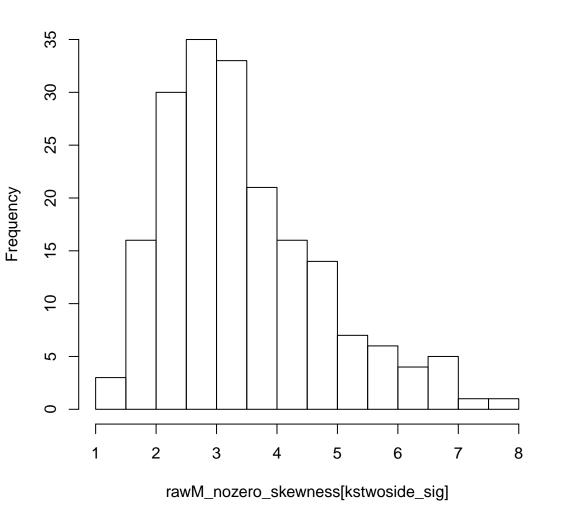
## sd of nozero log-expres of genes,ksgreater sig



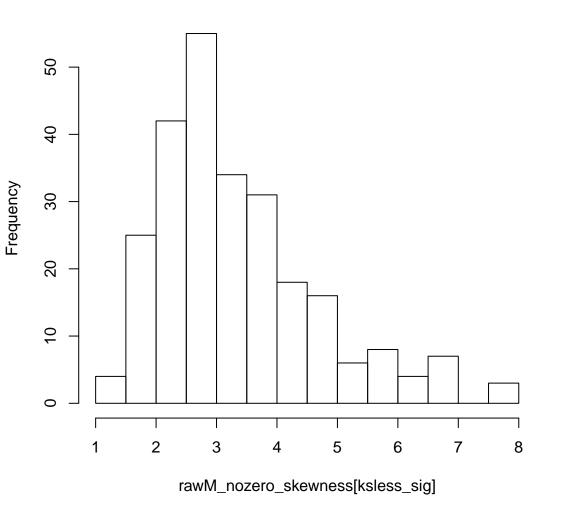
## sd of nozero log-expres of genes,ks no sig



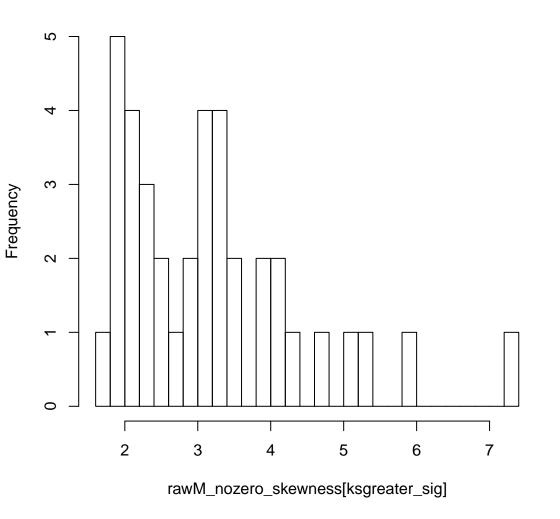
#### skewness of nozero log-expres of genes, kstwoside sig



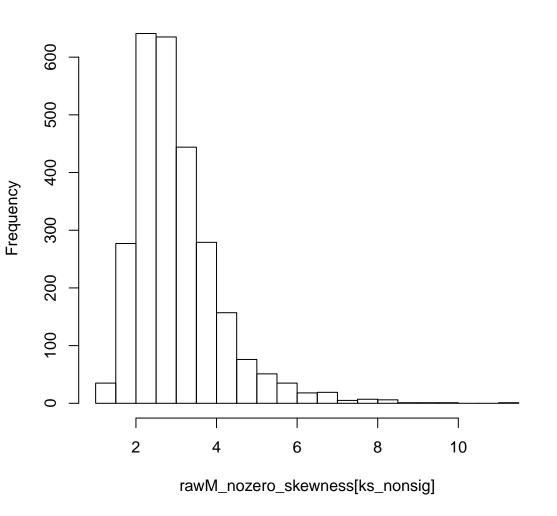
## skewness of nozero log-expres of genes, ksless sig



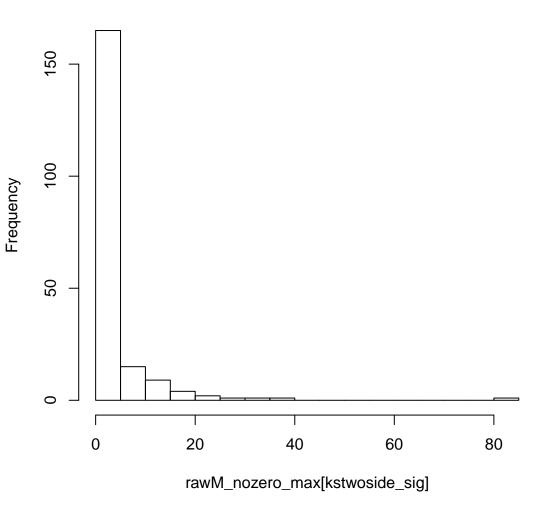
#### skewness of nozero log-expres of genes,ksgreater sig



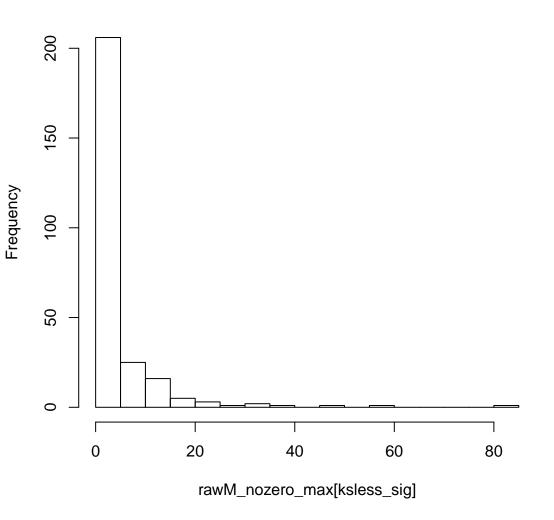
## skewness of nozero log-expres of genes,ks no sig



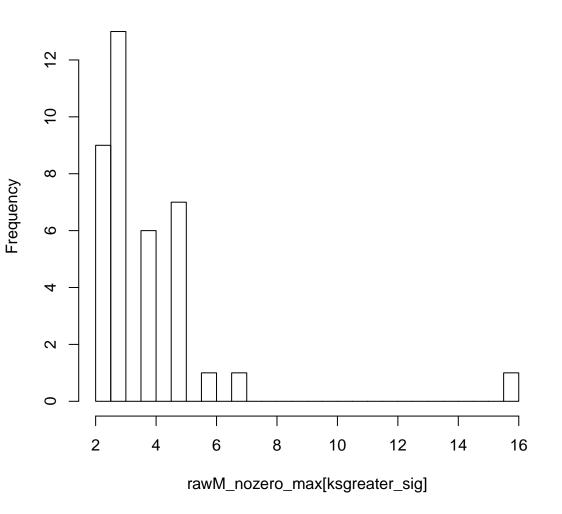
# max of nozero log-expres of genes, kstwoside sig



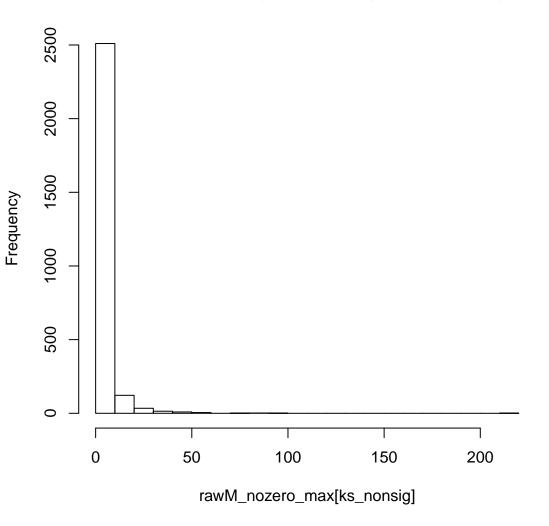
#### max of nozero log-expres of genes, ksless sig



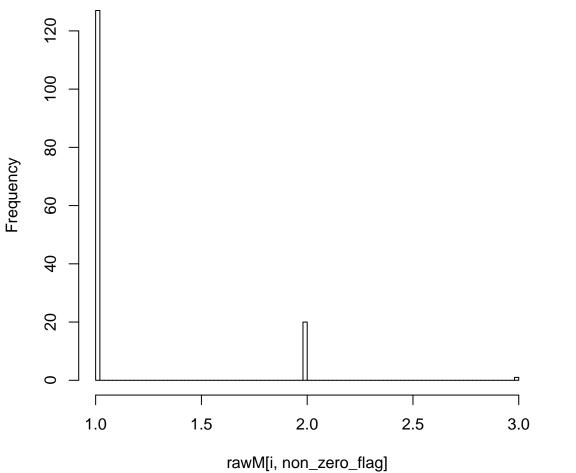
#### max of nozero log-expres of genes,ksgreater sig



#### max of nozero log-expres of genes,ks no sig

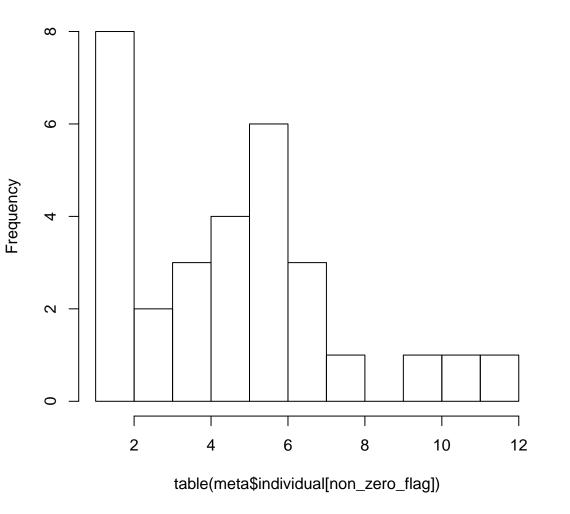


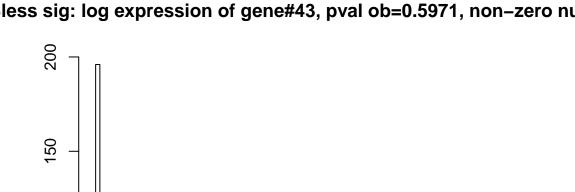
less sig: log expression of gene#38, pval ob=0.6542, non-zero nu

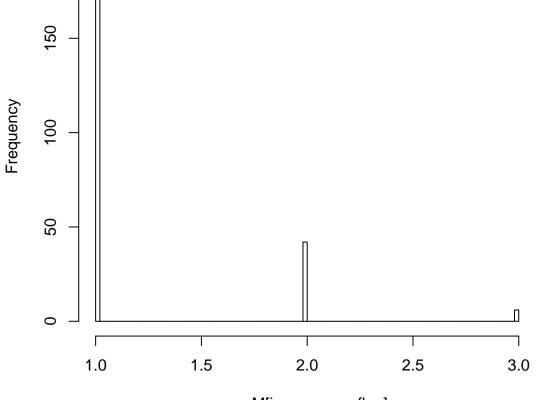


ind#: 30, diag#: 2

#### KSless sig: individual expression cell count of gene#38

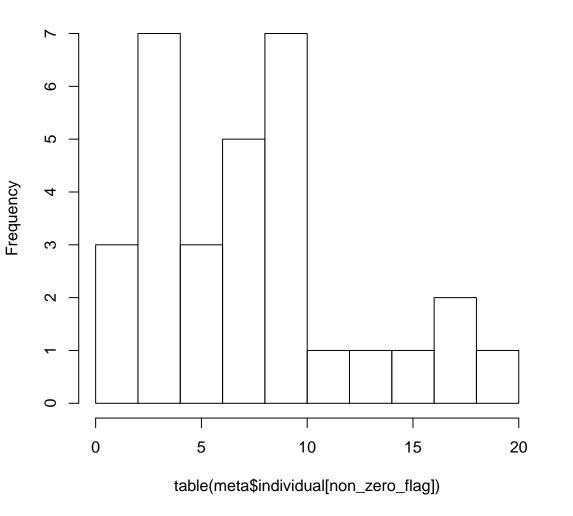


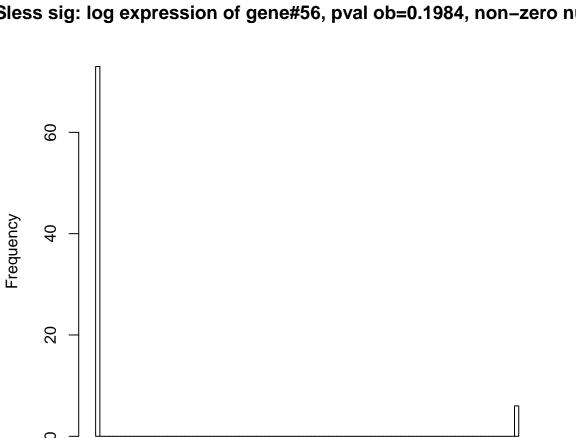




rawM[i, non\_zero\_flag] ind#: 31, diag#: 2

## KSless sig: individual expression cell count of gene#43





1.8

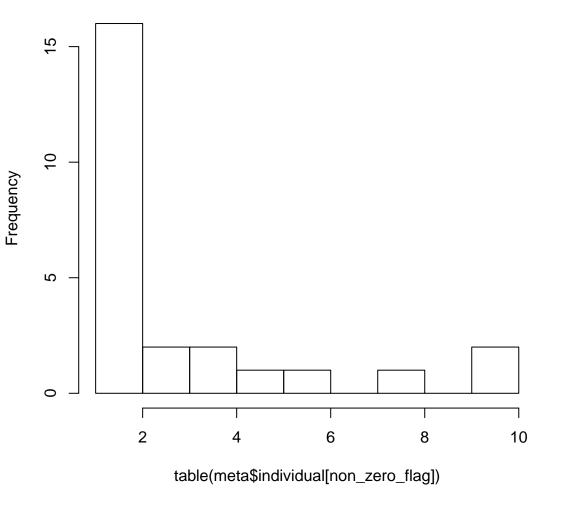
2.0

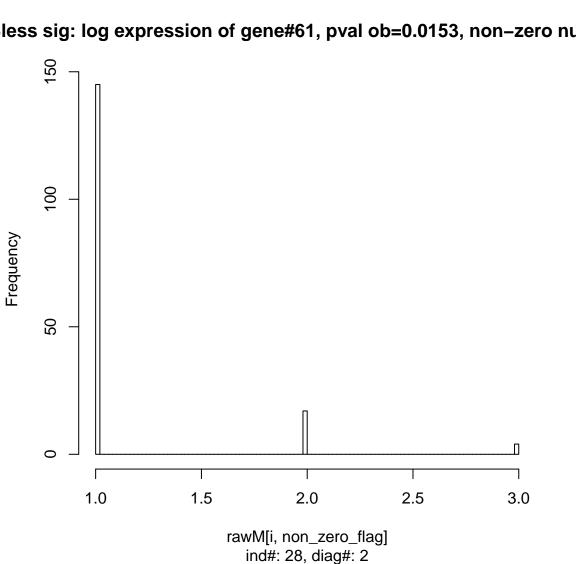
1.0 1.2 1.4 1.6

rawM[i, non\_zero\_flag]

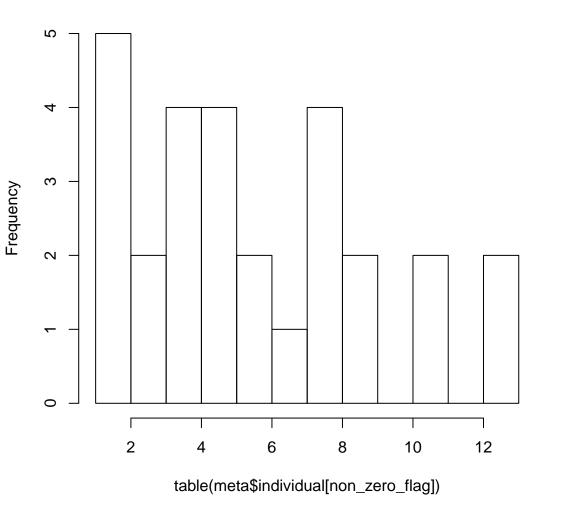
ind#: 25, diag#: 2

## KSless sig: individual expression cell count of gene#56

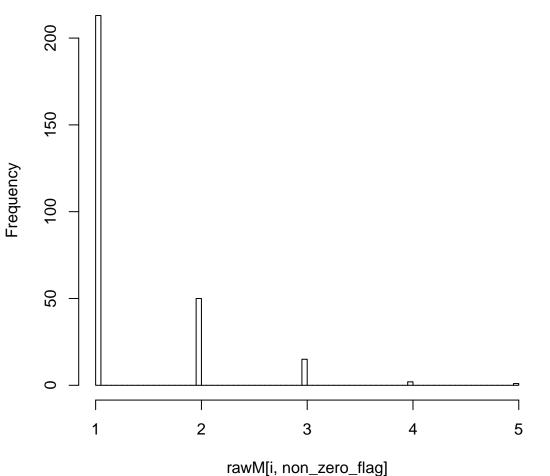




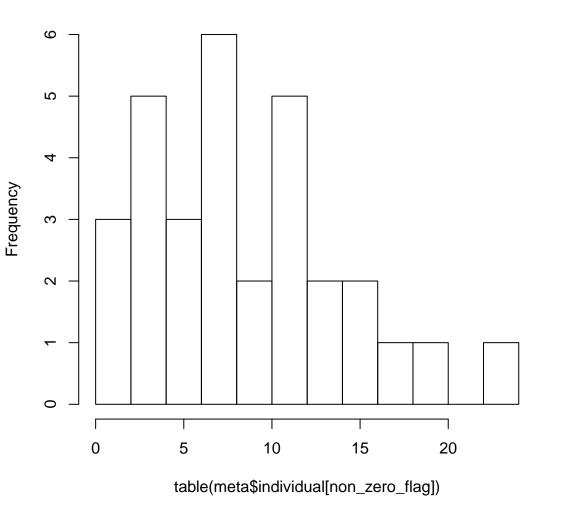
## KSless sig: individual expression cell count of gene#61

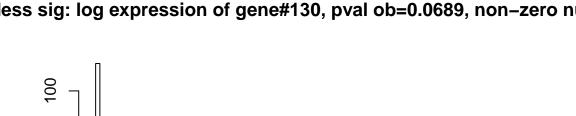


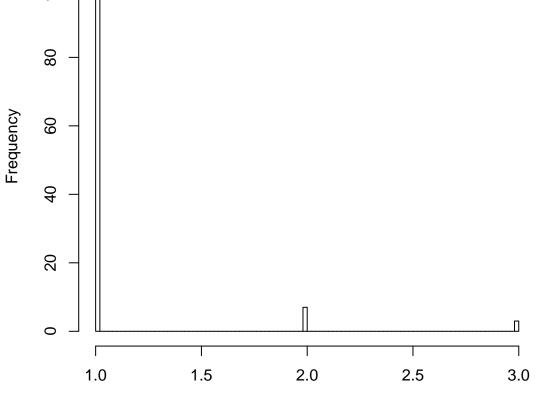
less sig: log expression of gene#78, pval ob=0.5566, non-zero nu



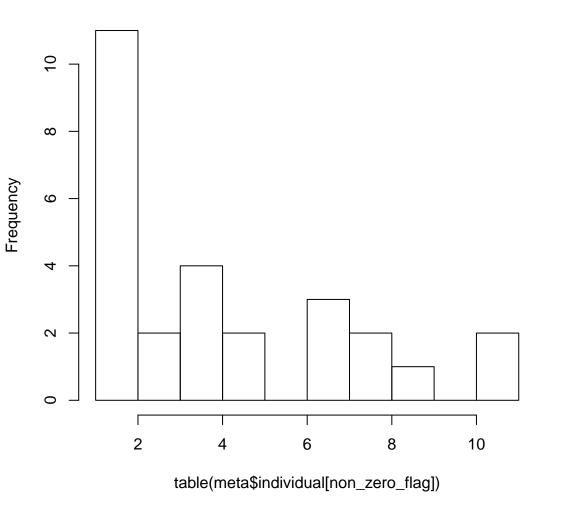
ind#: 31, diag#: 2

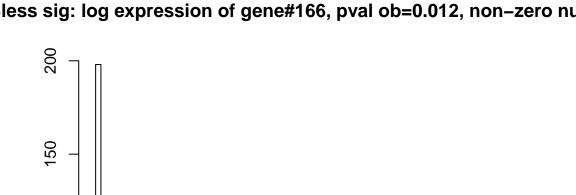


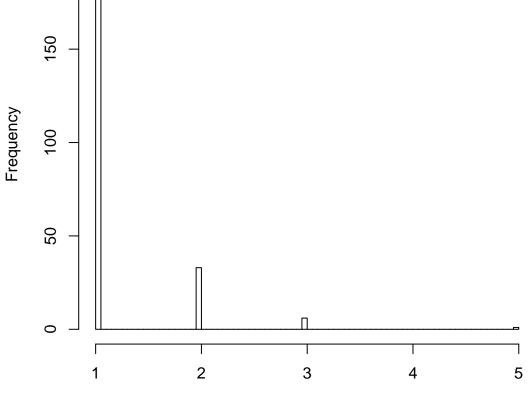




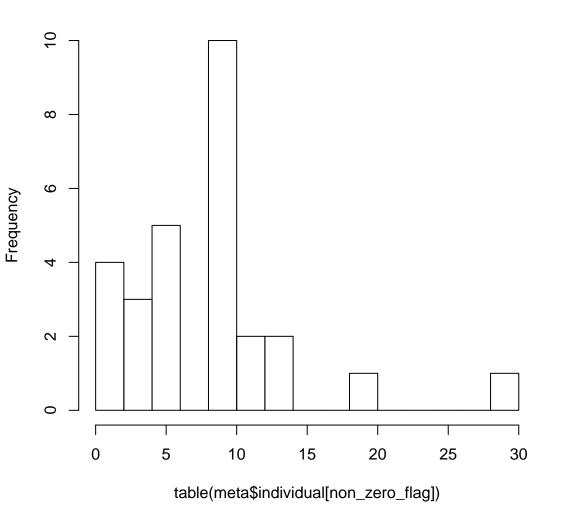
rawM[i, non\_zero\_flag] ind#: 27, diag#: 2



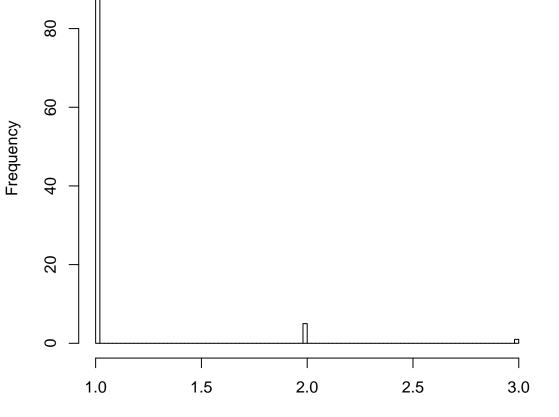




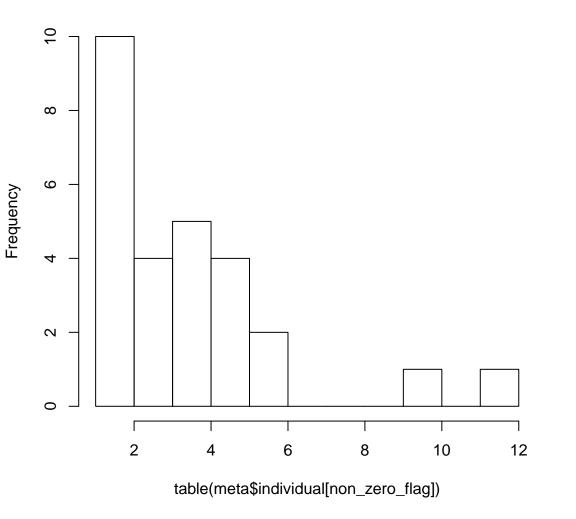
rawM[i, non\_zero\_flag] ind#: 28, diag#: 2

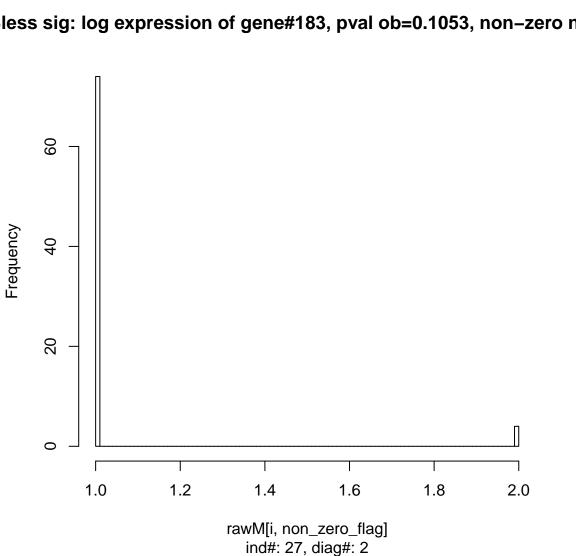


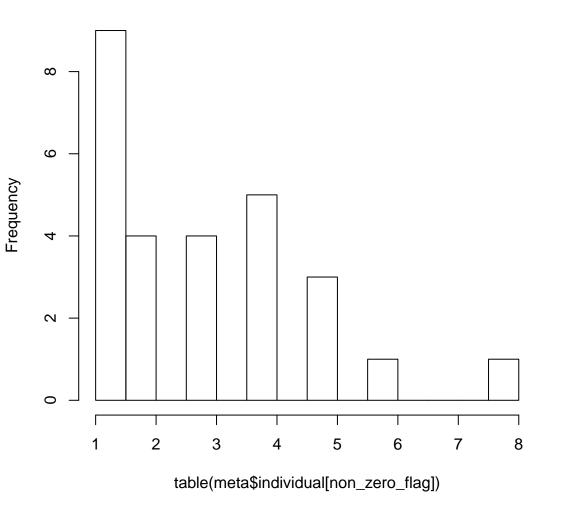
ess sig: log expression of gene#178, pval ob=0.0519, non-zero n

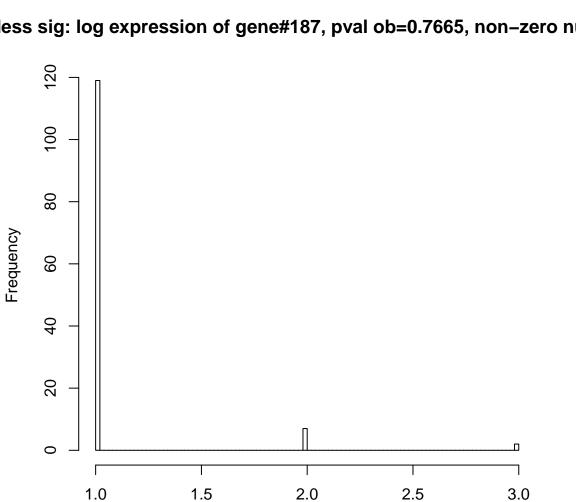


rawM[i, non\_zero\_flag] ind#: 27, diag#: 2

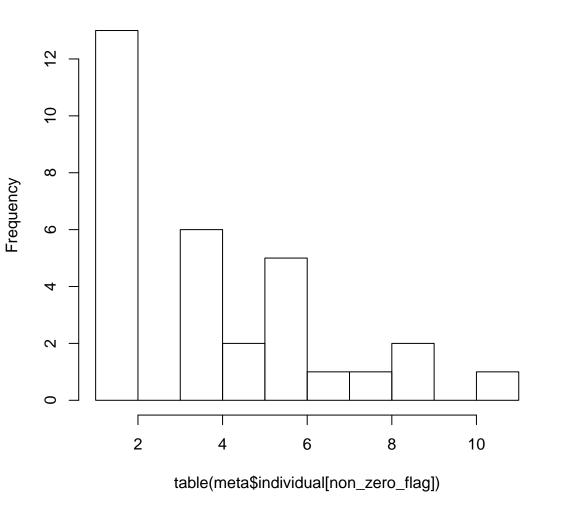






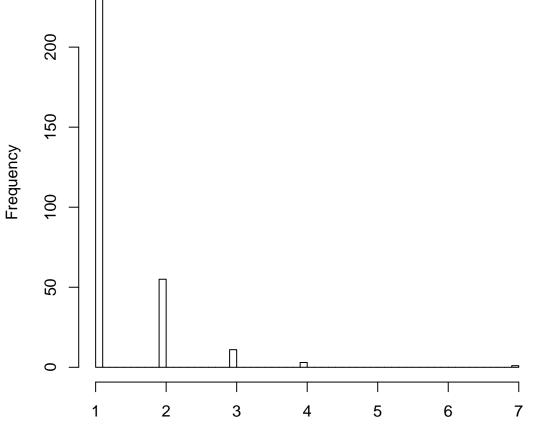


rawM[i, non\_zero\_flag] ind#: 31, diag#: 2

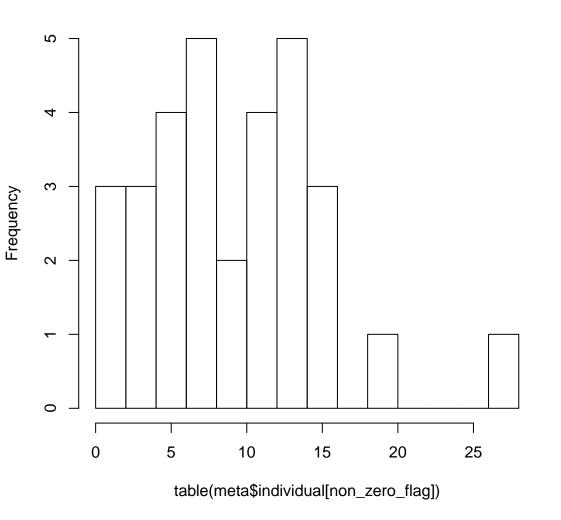


## п

S nonsig: log expression of gene#1, pval ob=0.2482, non-zero nu

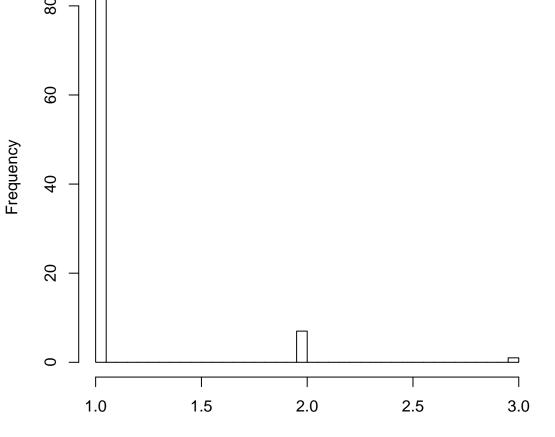


rawM[i, non\_zero\_flag] ind#: 31, diag#: 2

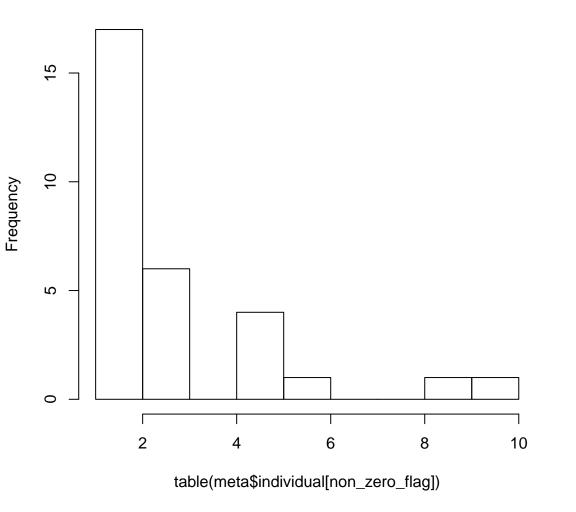


# 8 7 |

S nonsig: log expression of gene#2, pval ob=0.1965, non-zero nu

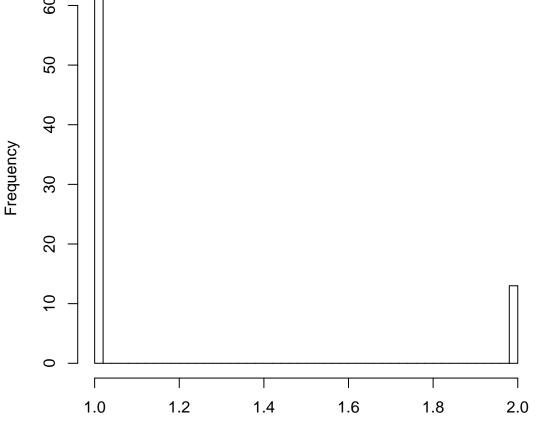


rawM[i, non\_zero\_flag] ind#: 30, diag#: 2

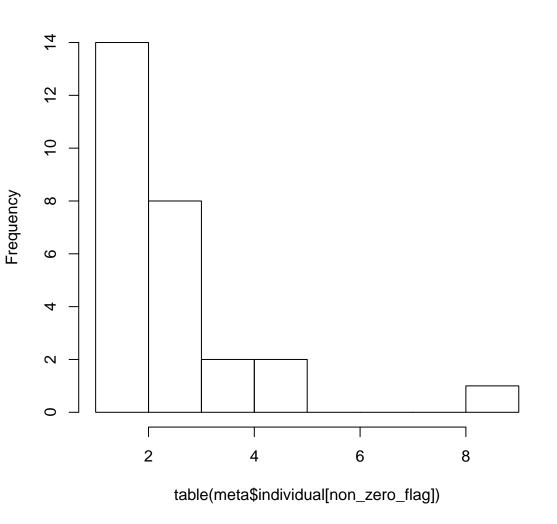


## 9 7

S nonsig: log expression of gene#3, pval ob=0.8037, non-zero nu

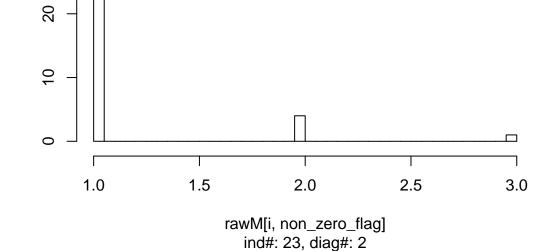


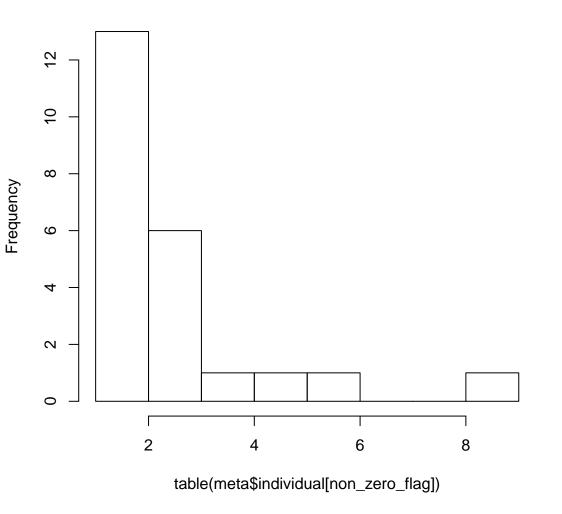
rawM[i, non\_zero\_flag] ind#: 27, diag#: 2



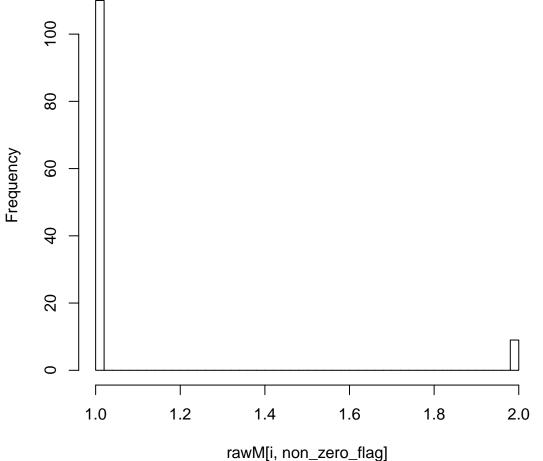
## 

S nonsig: log expression of gene#5, pval ob=0.4724, non-zero nu

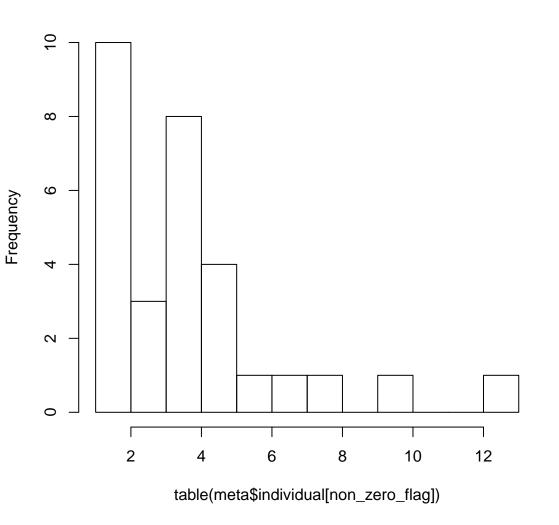




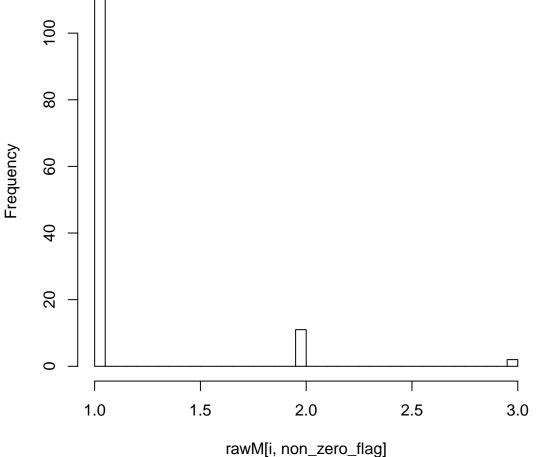
S nonsig: log expression of gene#6, pval ob=0.0628, non-zero nu



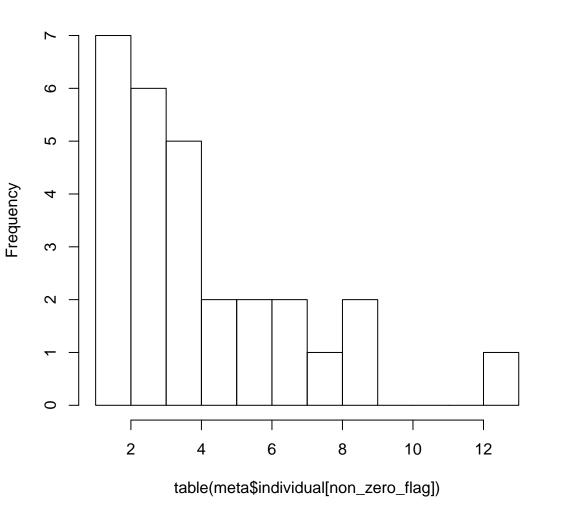
ind#: 30, diag#: 2



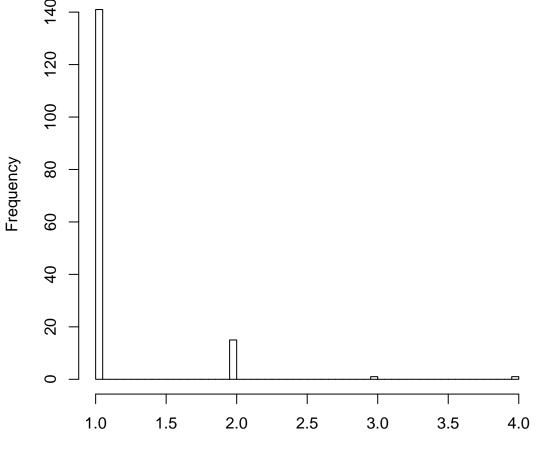
S nonsig: log expression of gene#7, pval ob=0.1415, non-zero nu



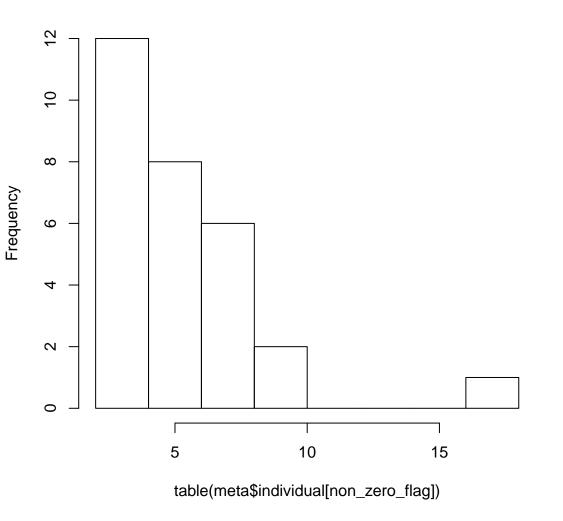
ind#: 28, diag#: 2



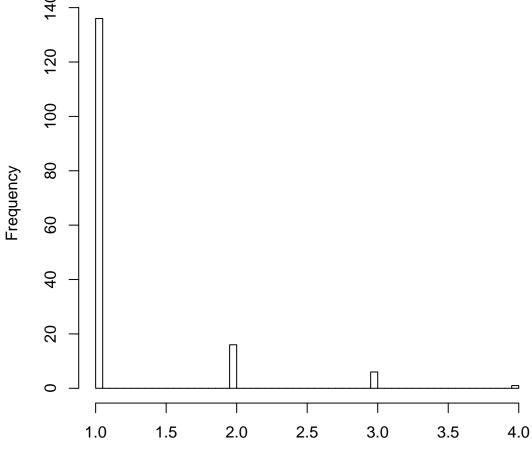
S nonsig: log expression of gene#9, pval ob=0.9089, non-zero nu



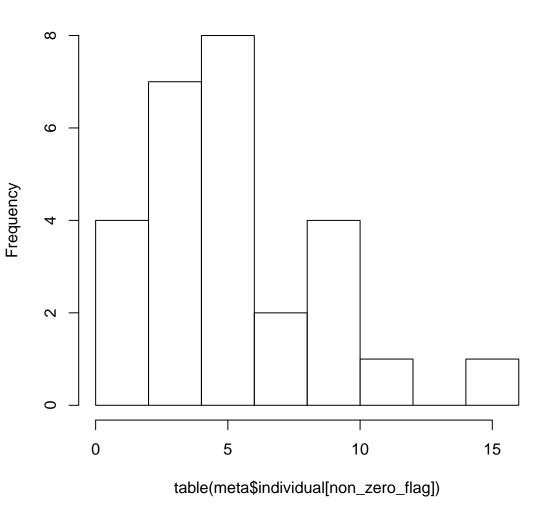
rawM[i, non\_zero\_flag] ind#: 29, diag#: 2



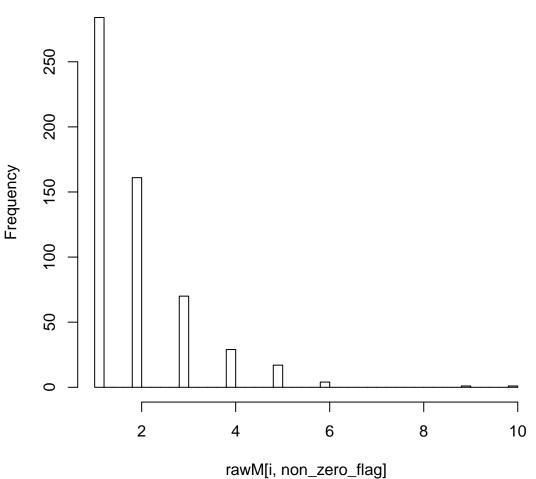
inonsig: log expression of gene#10, pval ob=0.1512, non–zero nເ



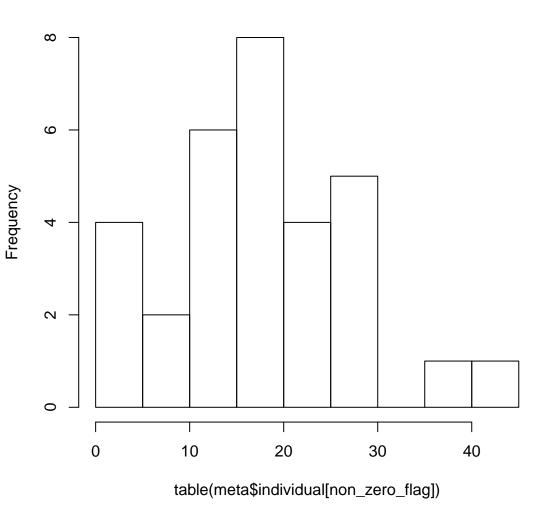
rawM[i, non\_zero\_flag] ind#: 27, diag#: 2



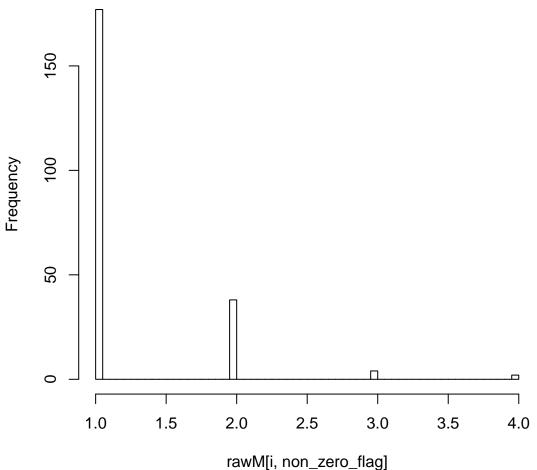
nonsig: log expression of gene#11, pval ob=0.8867, non-zero nu



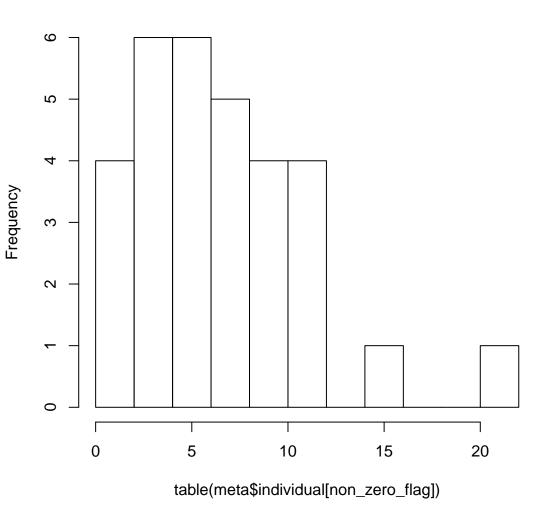
ind#: 31, diag#: 2

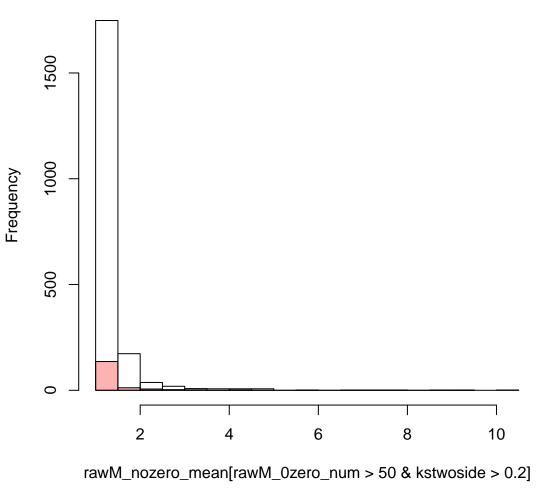


s nonsig: log expression of gene#12, pval ob=0.5956, non–zero nເ

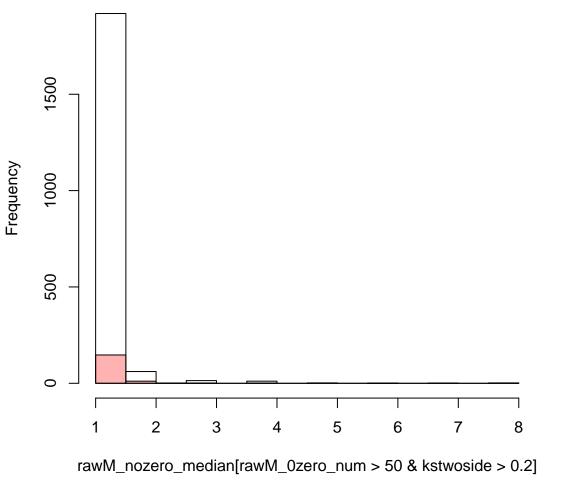


ind#: 31, diag#: 2

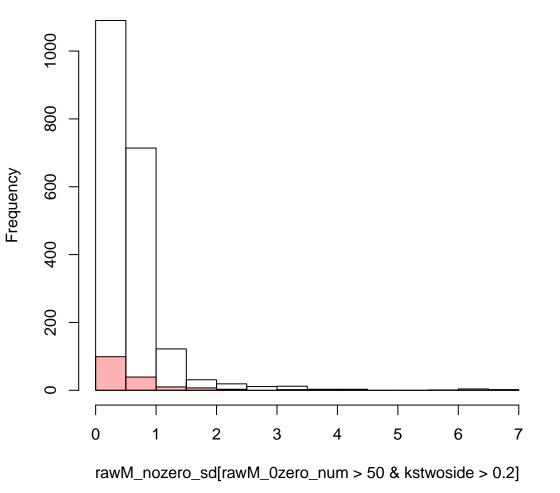




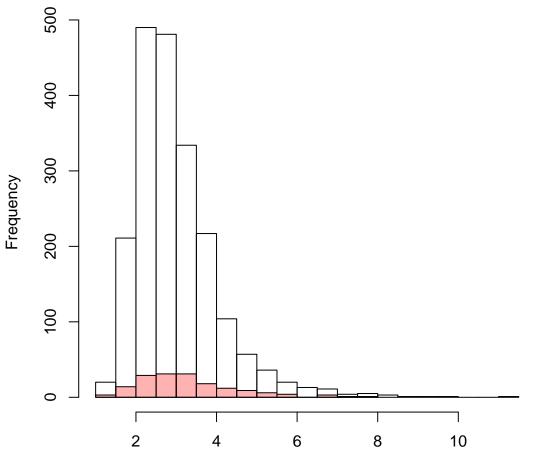
ogram of rawM\_nozero\_median[rawM\_0zero\_num > 50 & kstwosi



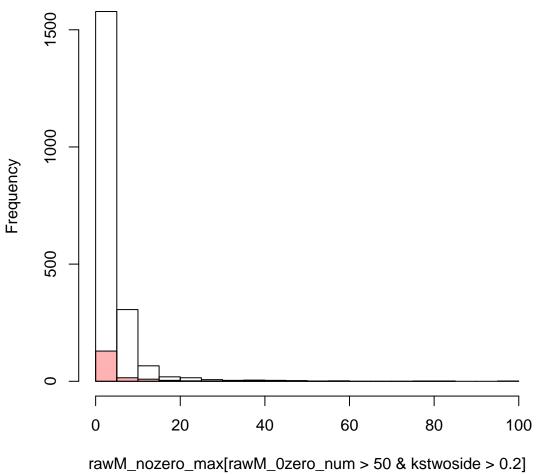
istogram of rawM\_nozero\_sd[rawM\_0zero\_num > 50 & kstwoside



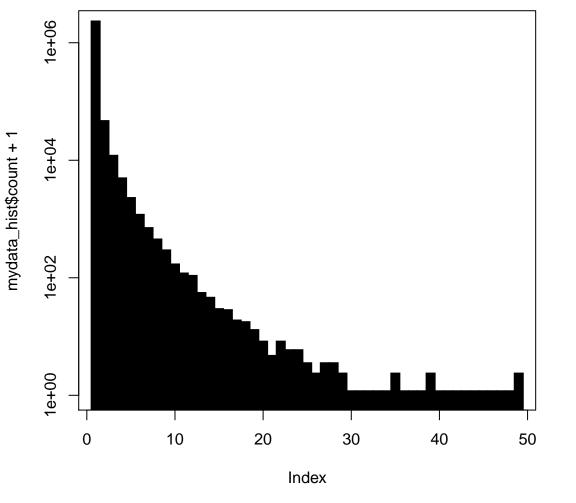
gram of rawM\_nozero\_skewness[rawM\_0zero\_num > 50 & kstwos



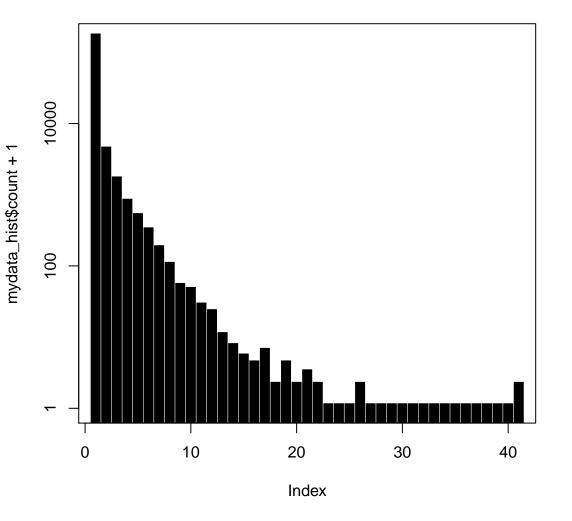
rawM\_nozero\_skewness[rawM\_0zero\_num > 50 & kstwoside > 0.2]



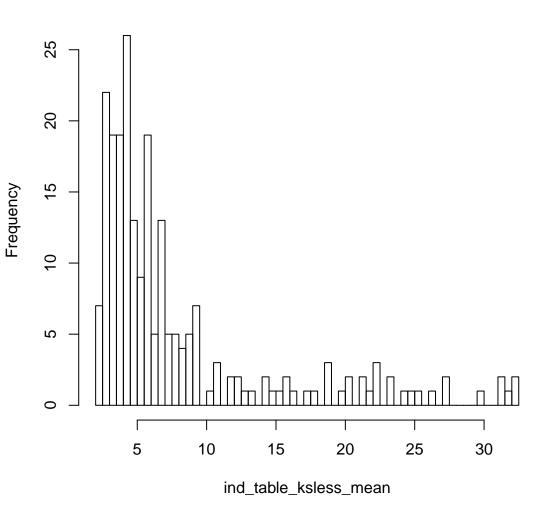
enes log(expression +1) with least 50 cell expression and kstwosi



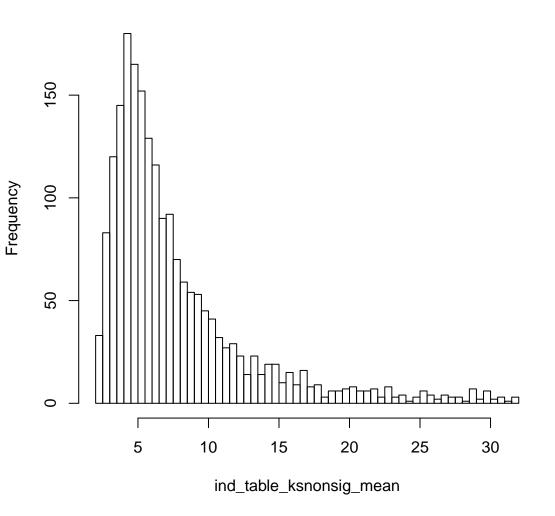
nes log(expression +1) with least 50 cell expression and kstwosic



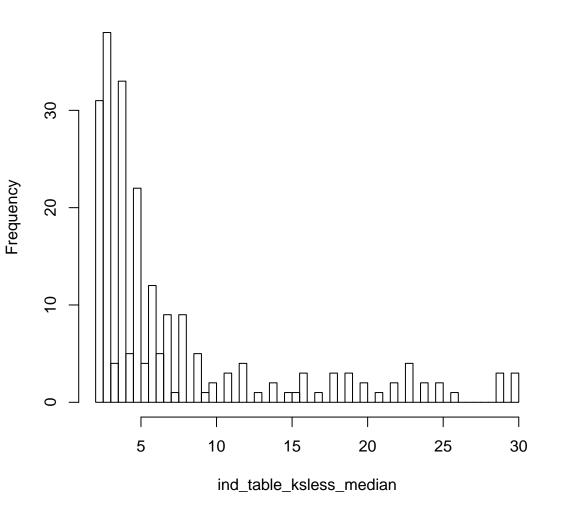
## Histogram of ind\_table\_ksless\_mean



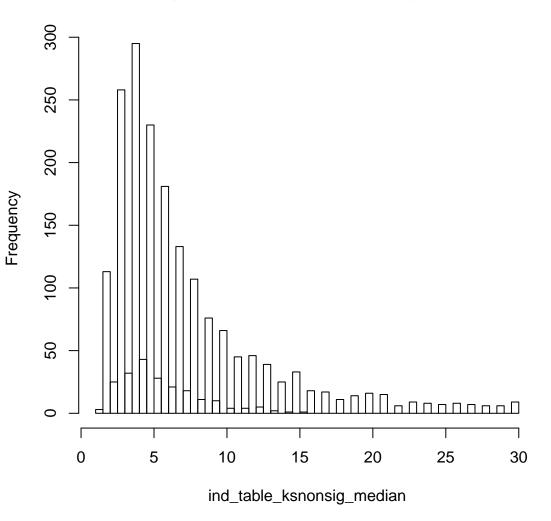
### Histogram of ind\_table\_ksnonsig\_mean



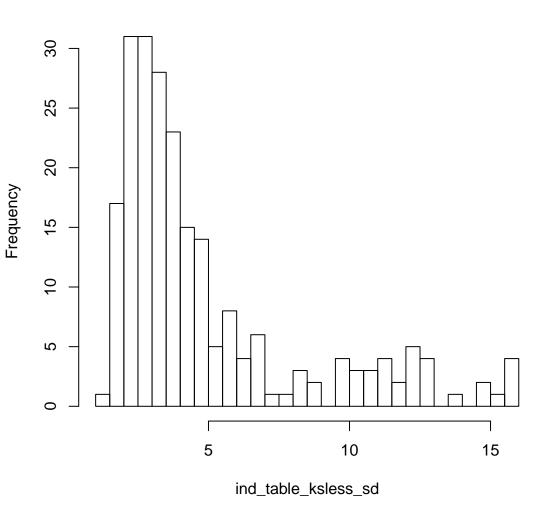
### Histogram of ind\_table\_ksless\_median



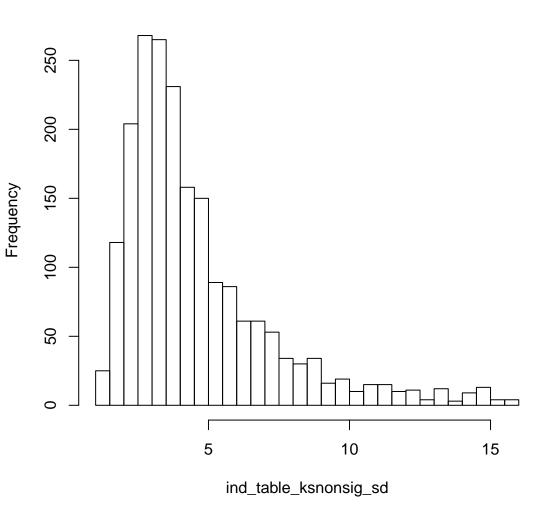
### Histogram of ind\_table\_ksnonsig\_median



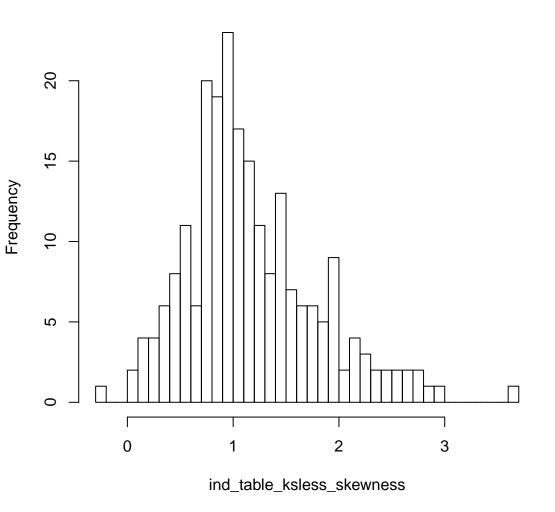
# Histogram of ind\_table\_ksless\_sd



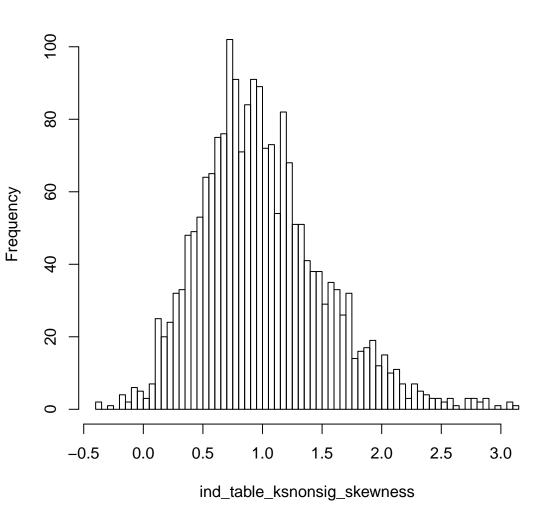
# Histogram of ind\_table\_ksnonsig\_sd



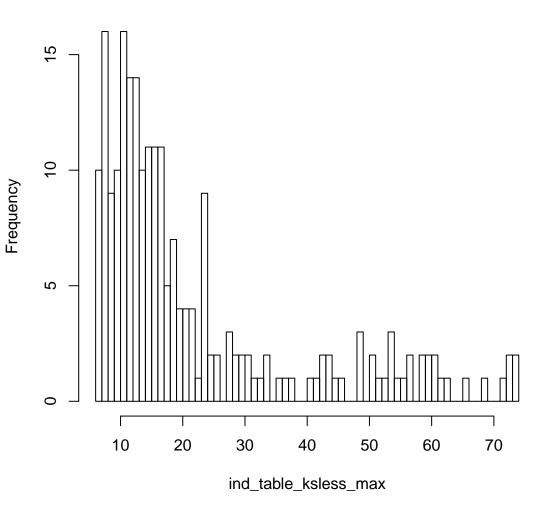
### Histogram of ind\_table\_ksless\_skewness



### Histogram of ind\_table\_ksnonsig\_skewness



## Histogram of ind\_table\_ksless\_max



### Histogram of ind\_table\_ksnonsig\_max

