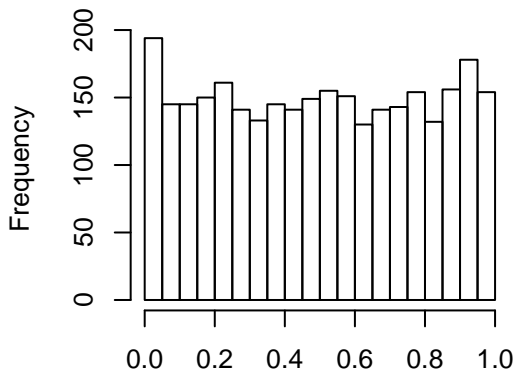
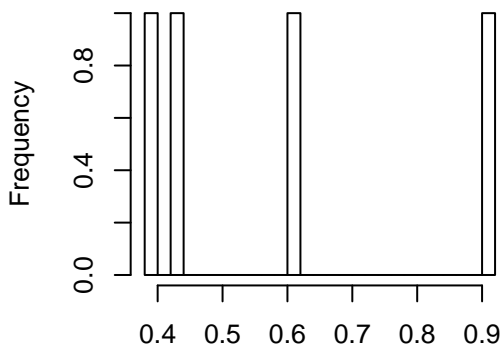


perm pvalues



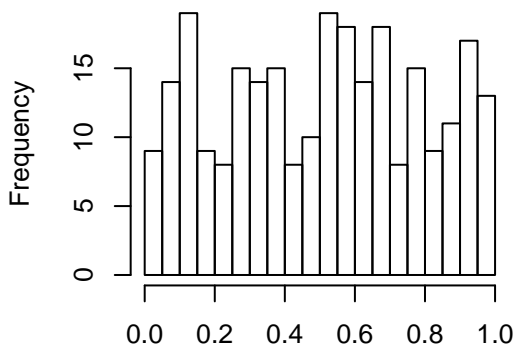
rawp
n=2998

s,rawM_0zero_num<max(20,min(rawM_0zero_num,100))



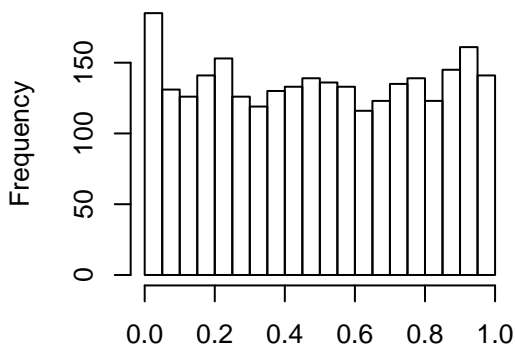
rawp[rawM_0zero_num < max(20, min(rawM_0zero_num, 100))]
n=4, ks_pval=1

perm pvalues,rawM_0zero_num <= 20



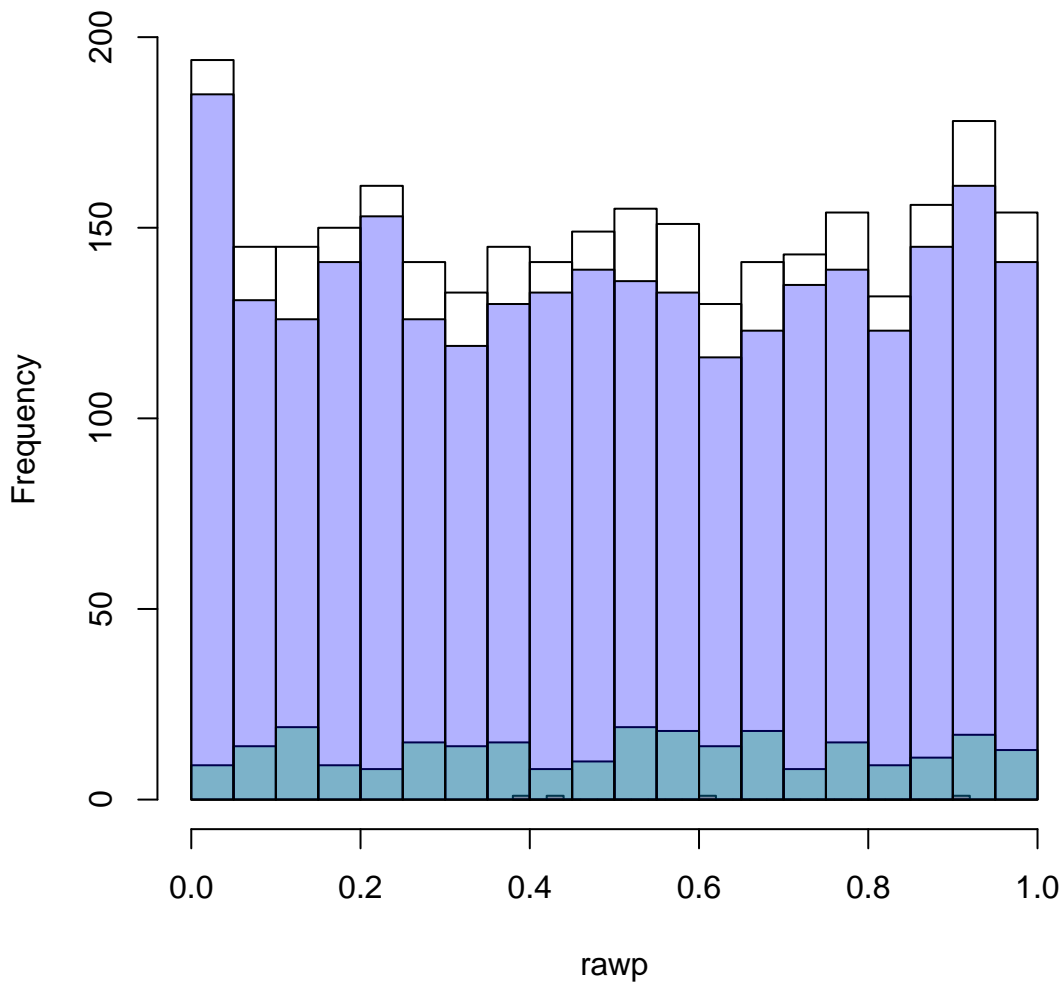
rawp[rawM_0zero_num >= 20 & rawM_0zero_num <= 100]
n=263, ks_pval=0.904931912174537

perm pvalues,rawM_0zero_num >= 100

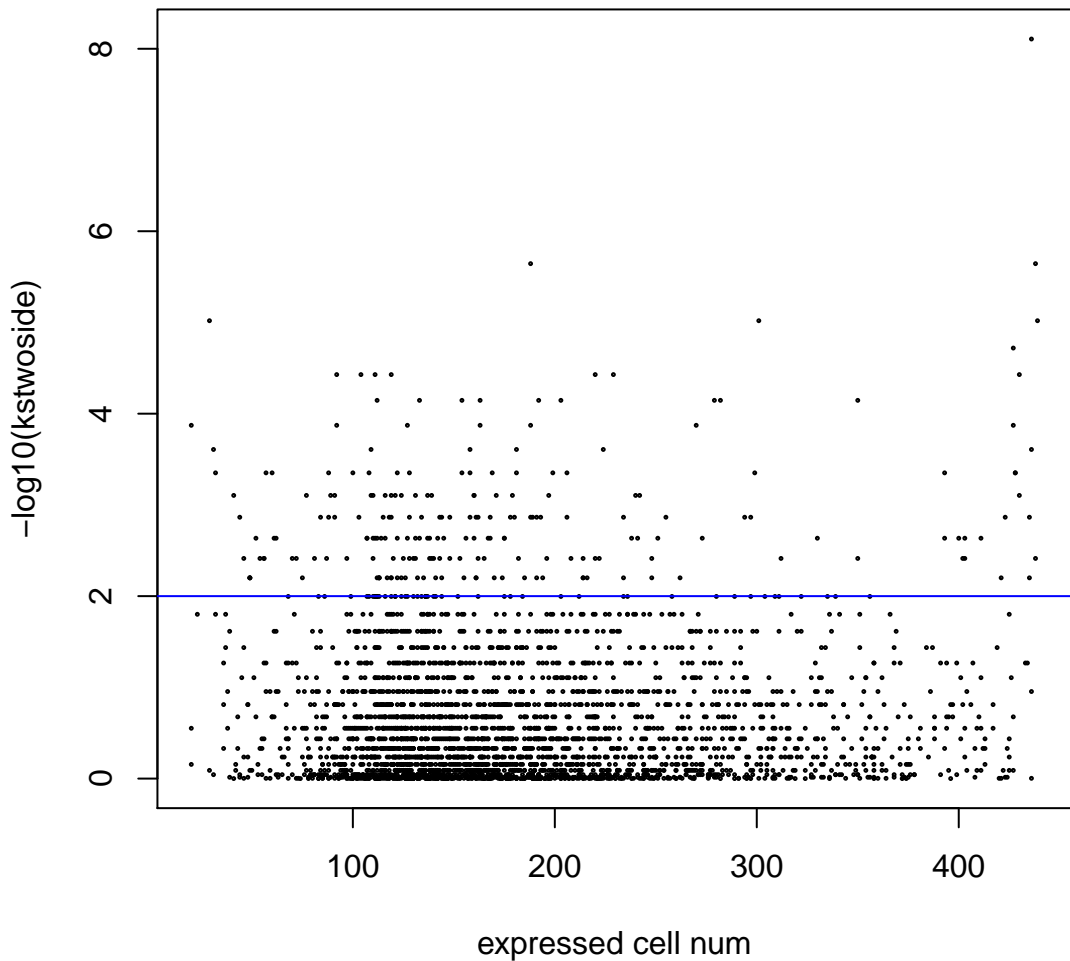


rawp[rawM_0zero_num >= 100]
n=2735, ks_pval=0.442321160248567

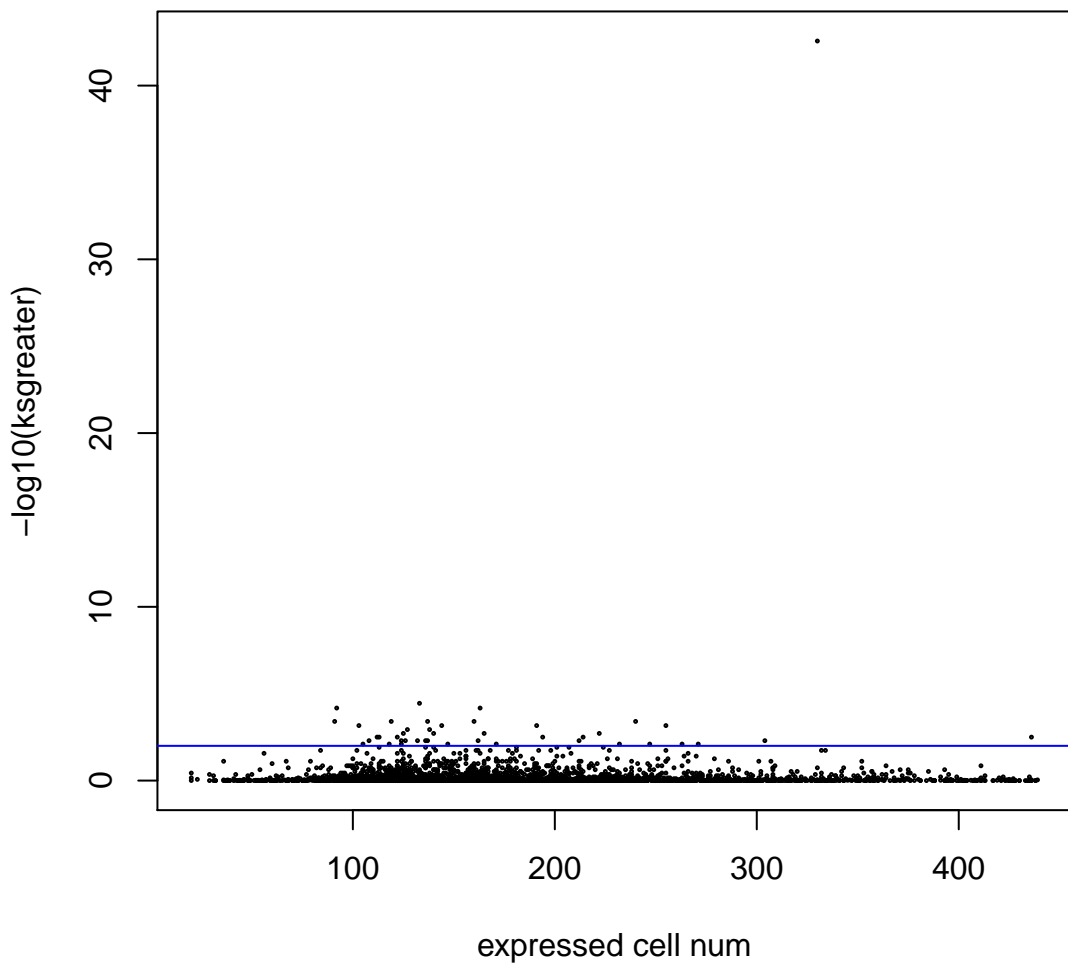
perm pvalues



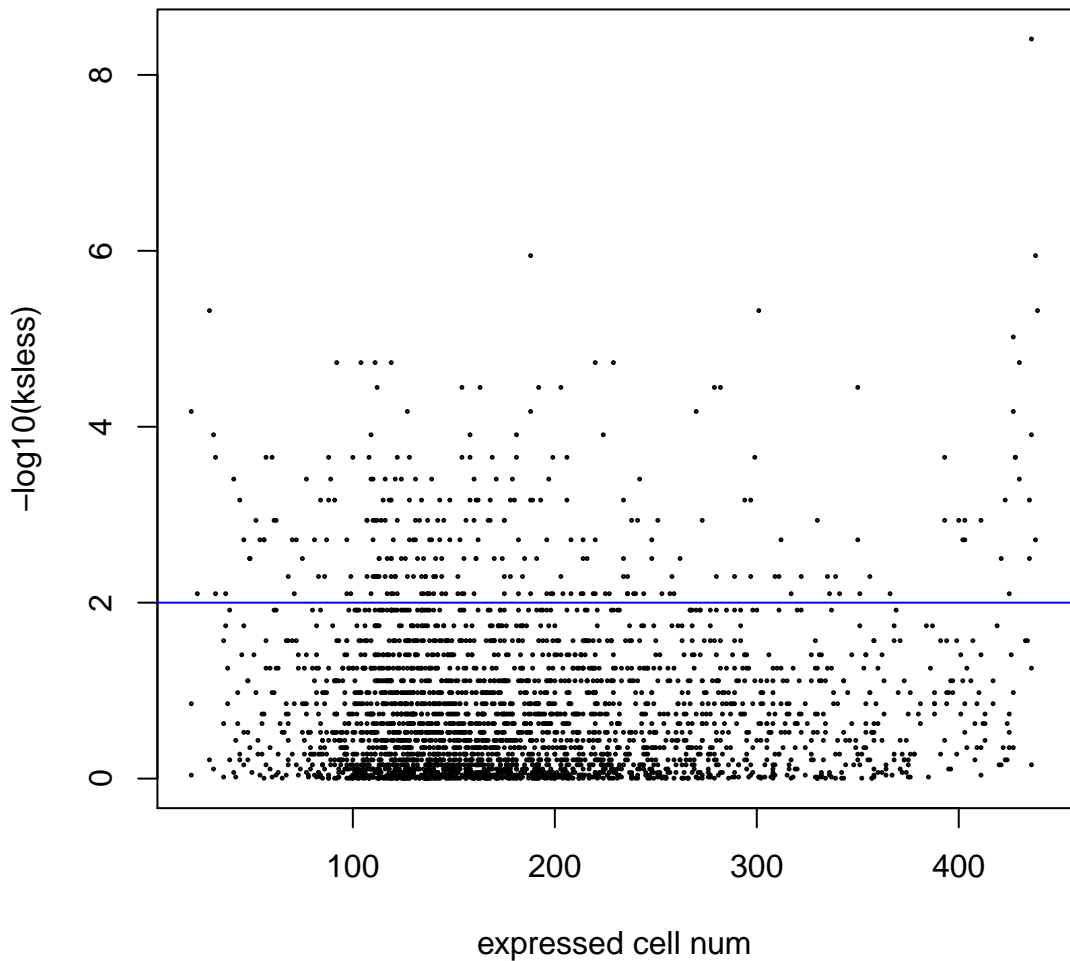
sig_KStwoside: 6.938%



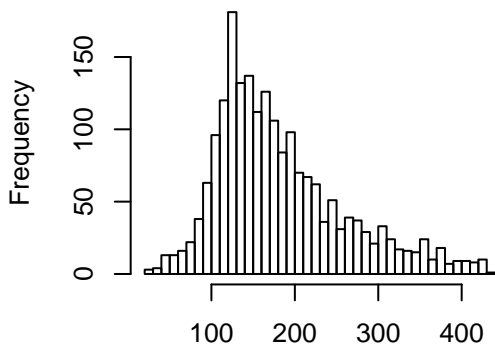
sig_KSgreater: 1.434%



sig_KSless: 9.173%

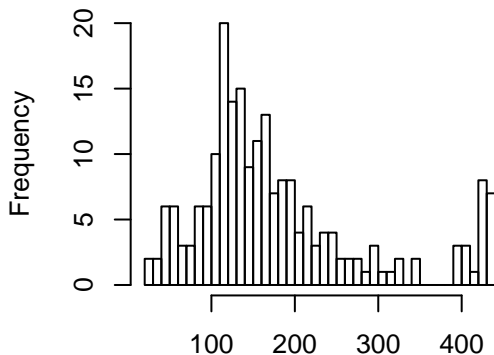


expression cell num,kstwoside>0.2



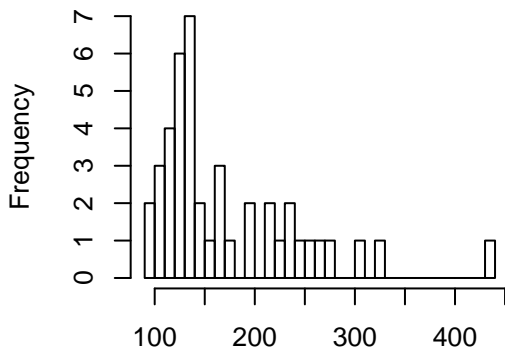
rawM_0zero_num[kstwoside > 0.2]

expression cell num,kstwoside<0.01



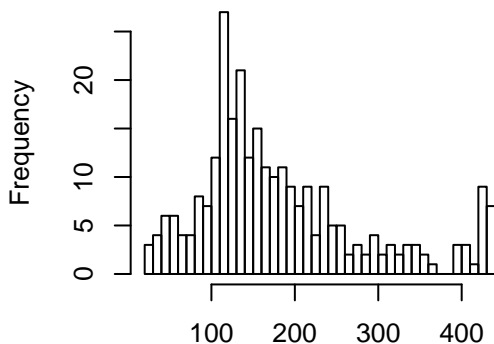
rawM_0zero_num[kstwoside < 0.01]

expression cell num,ksgreater<0.01



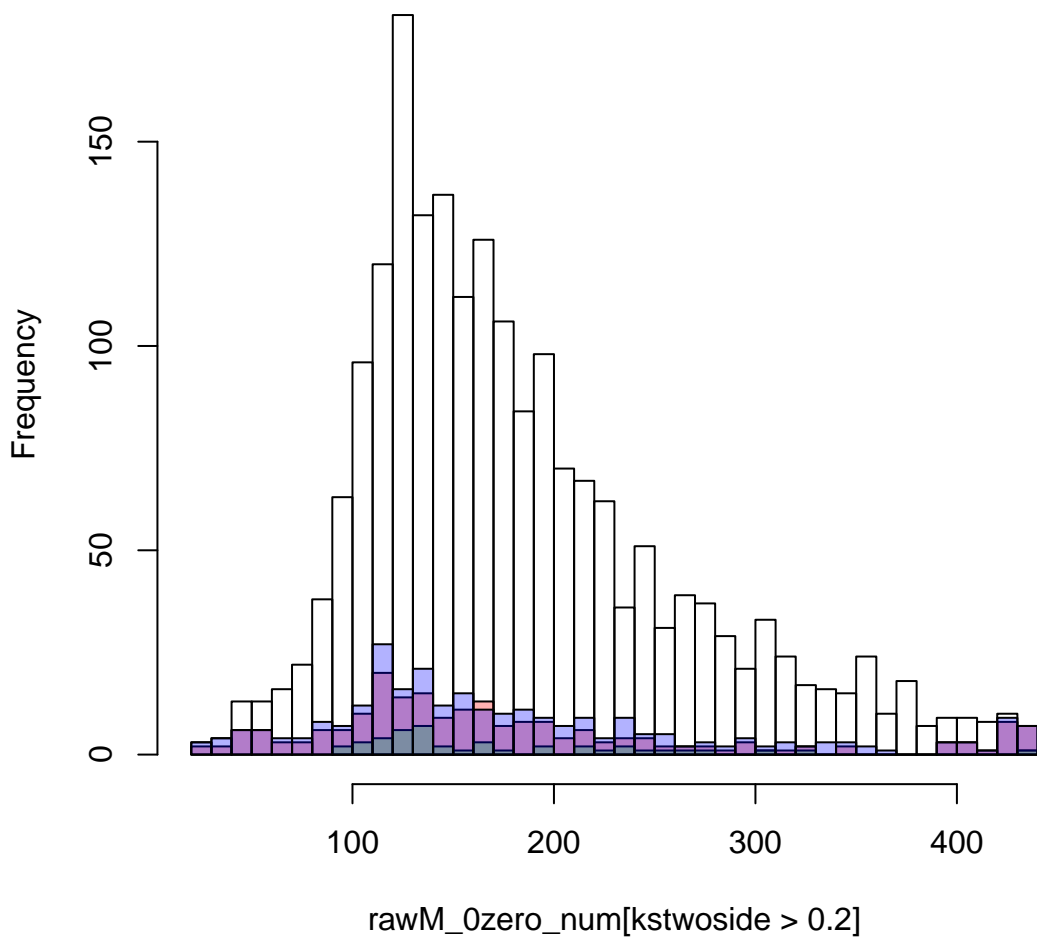
rawM_0zero_num[ksgreater < 0.01]

expression cell num,ksless<0.01

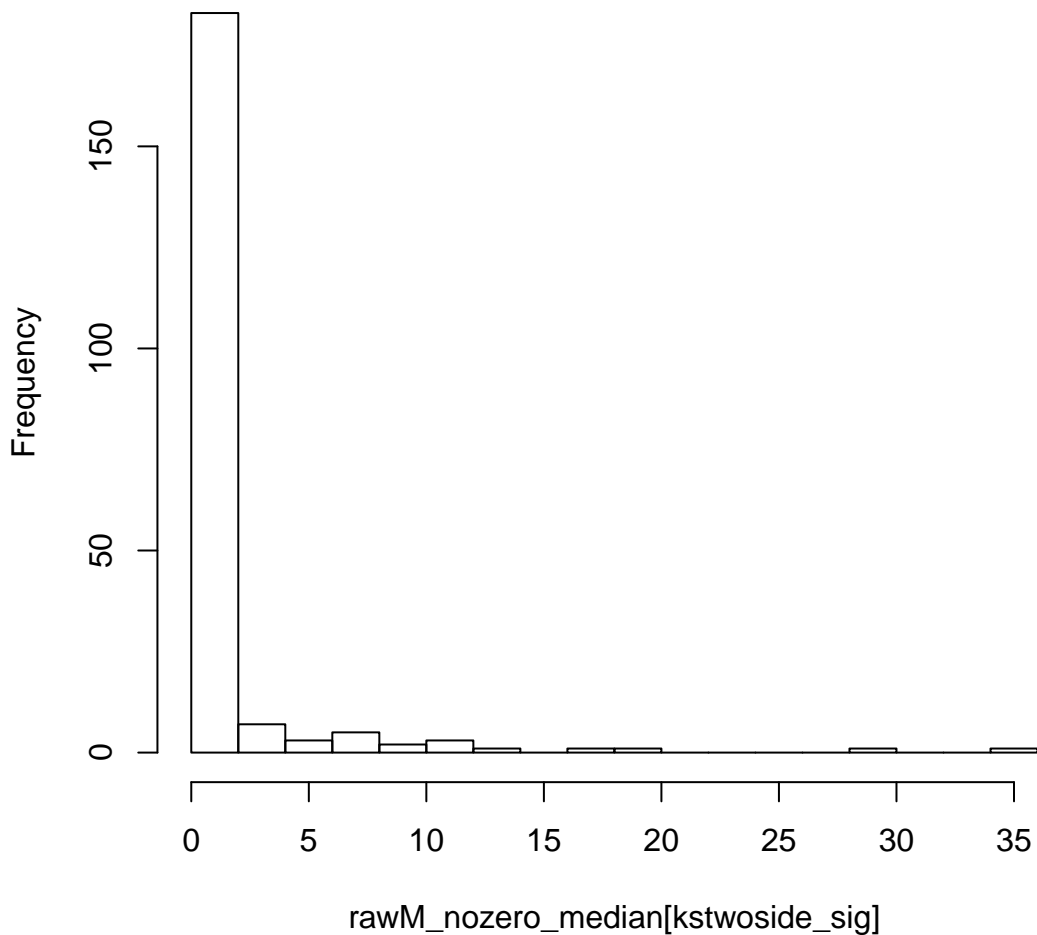


rawM_0zero_num[ksless < 0.01]

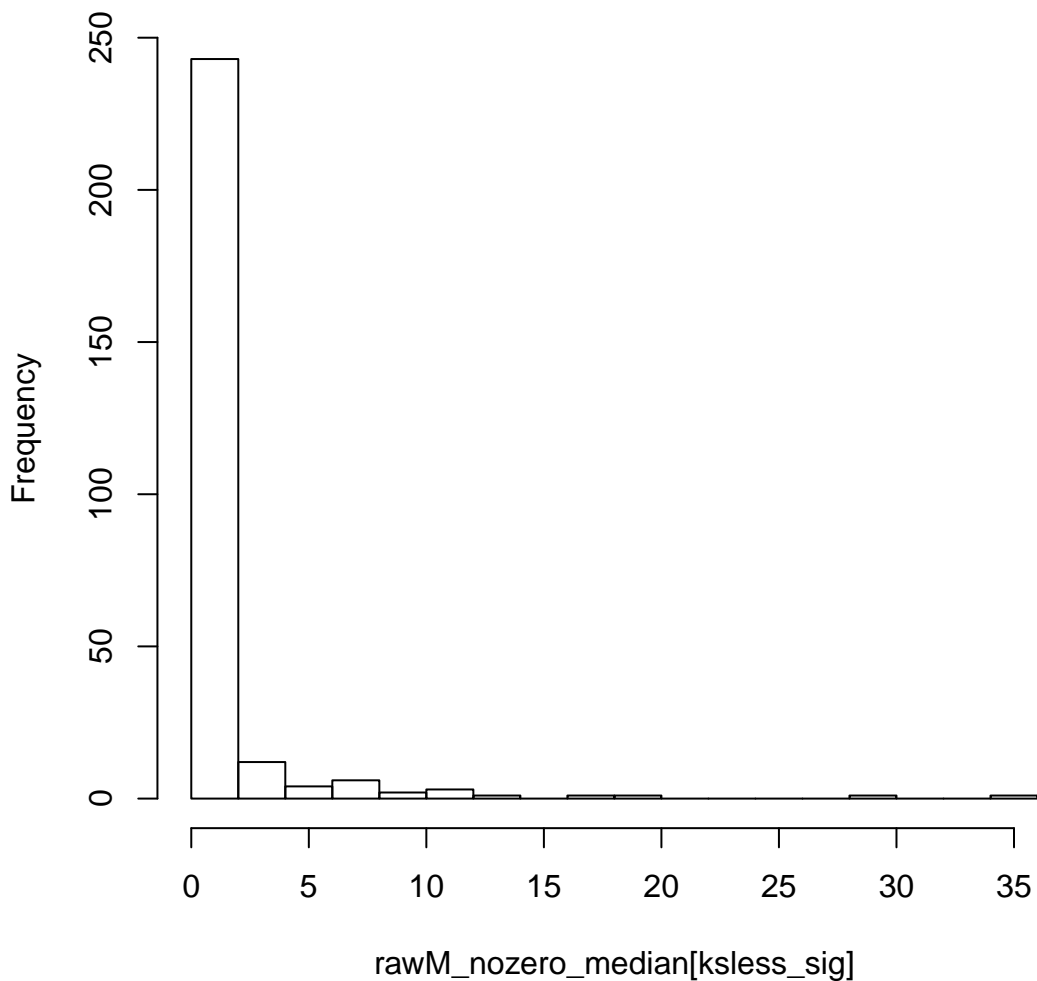
expression cell num



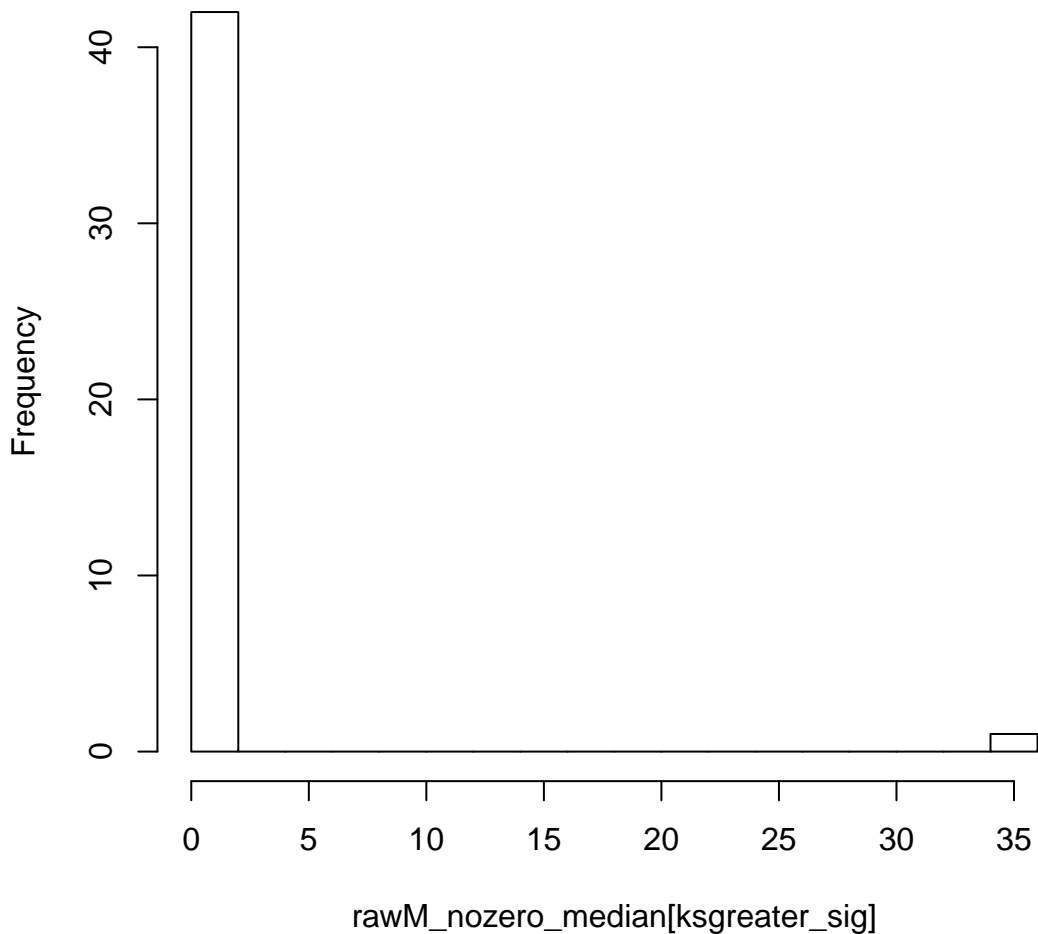
median of nozero log-express of genes, kstwoside sig



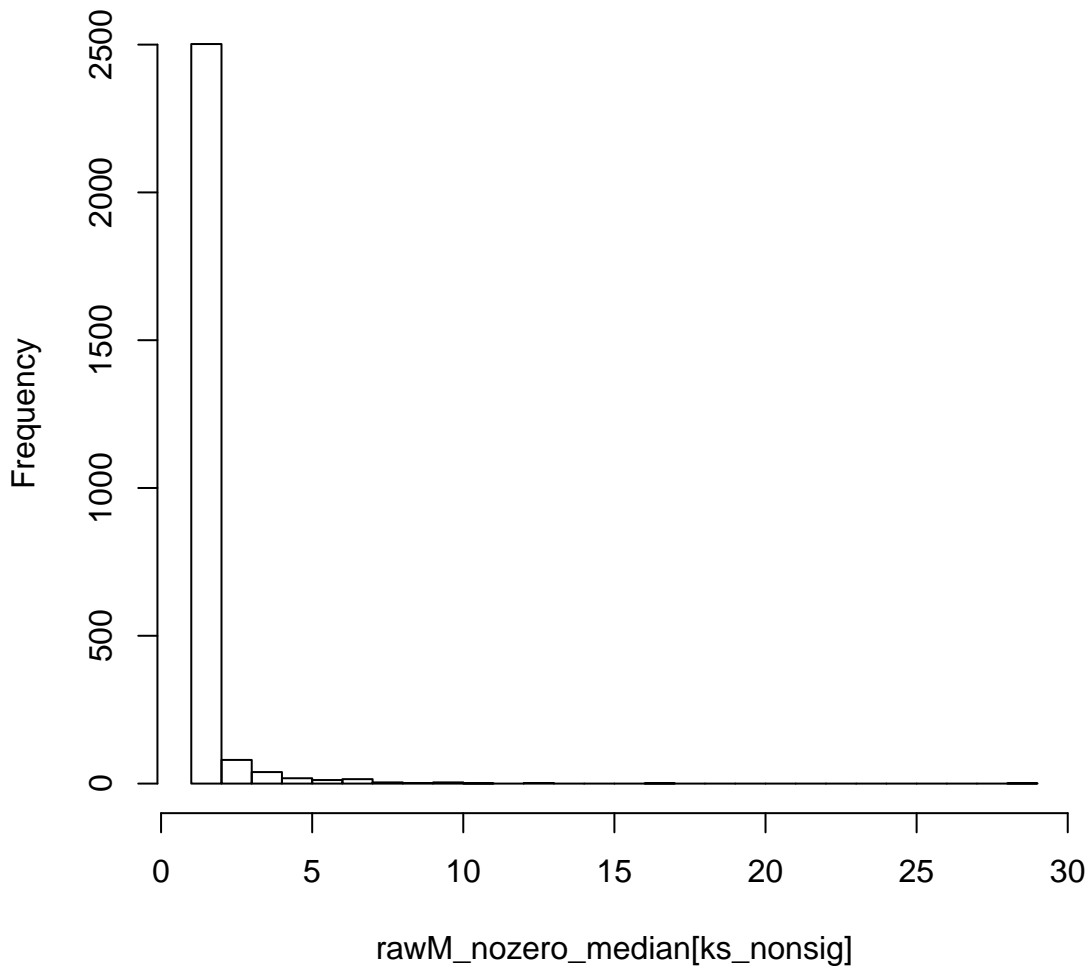
median of nozero log-express of genes, ksless sig



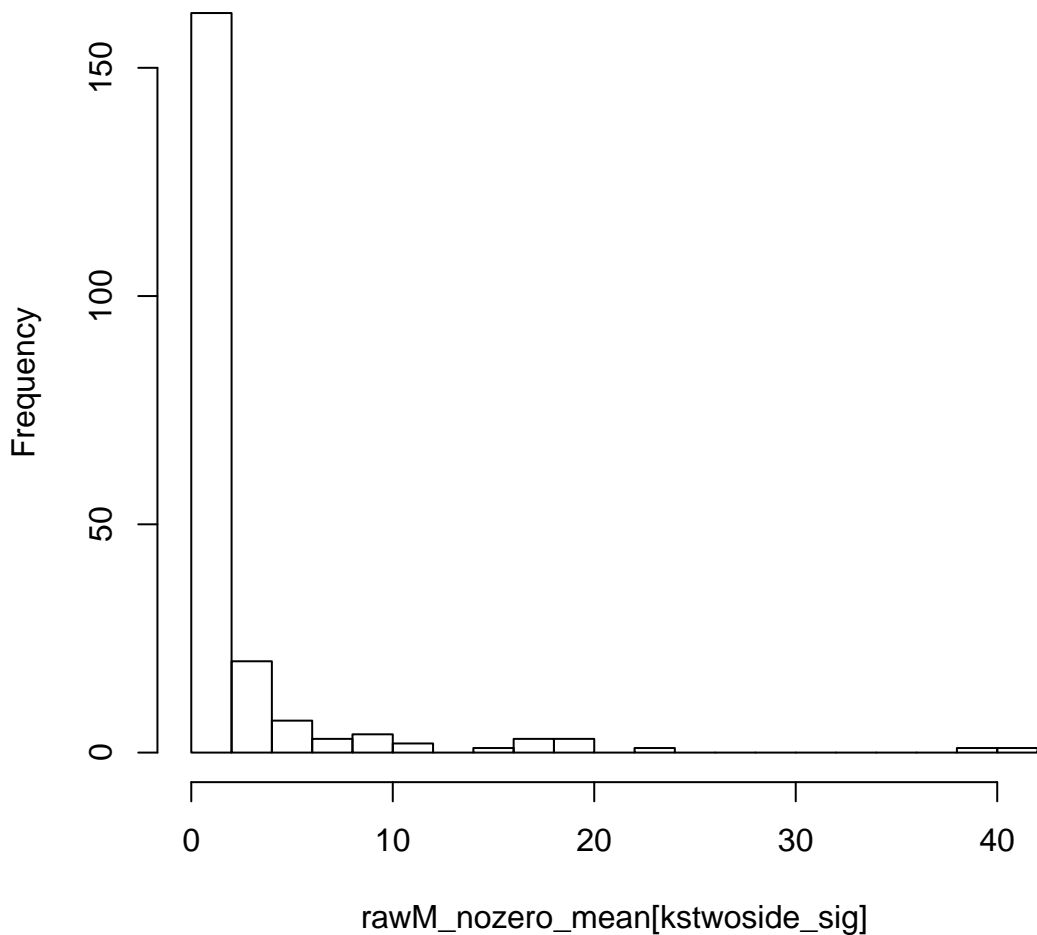
median of nozero log-express of genes,ksgreater sig



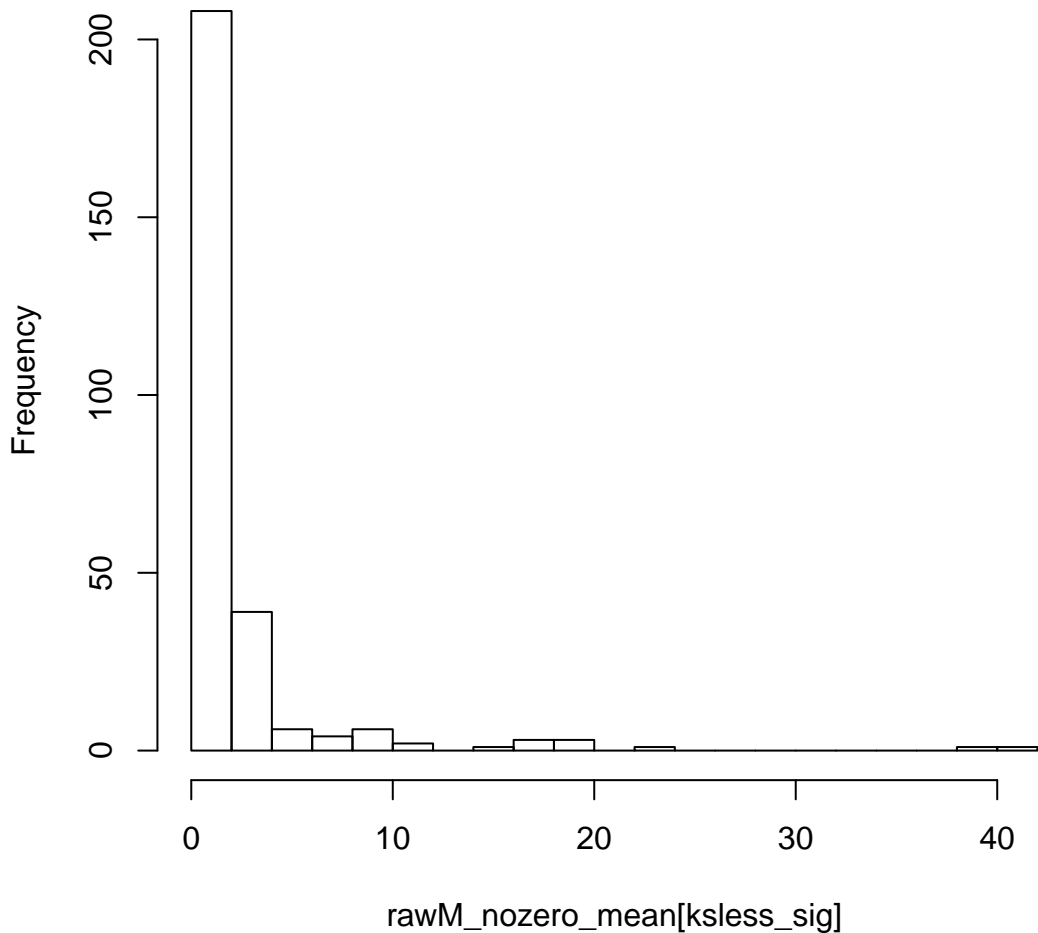
median of nozero log-express of genes,ks no sig



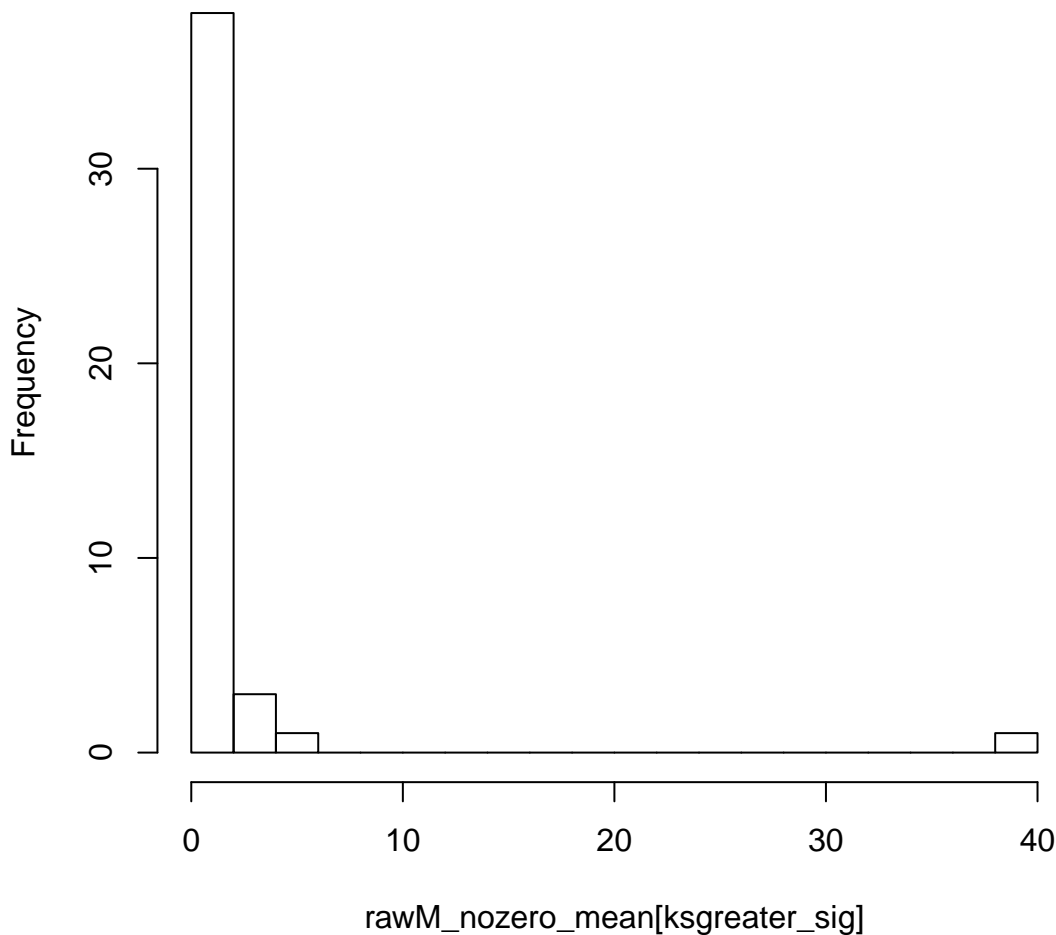
mean of nozero log-express of genes, kstwo side sig



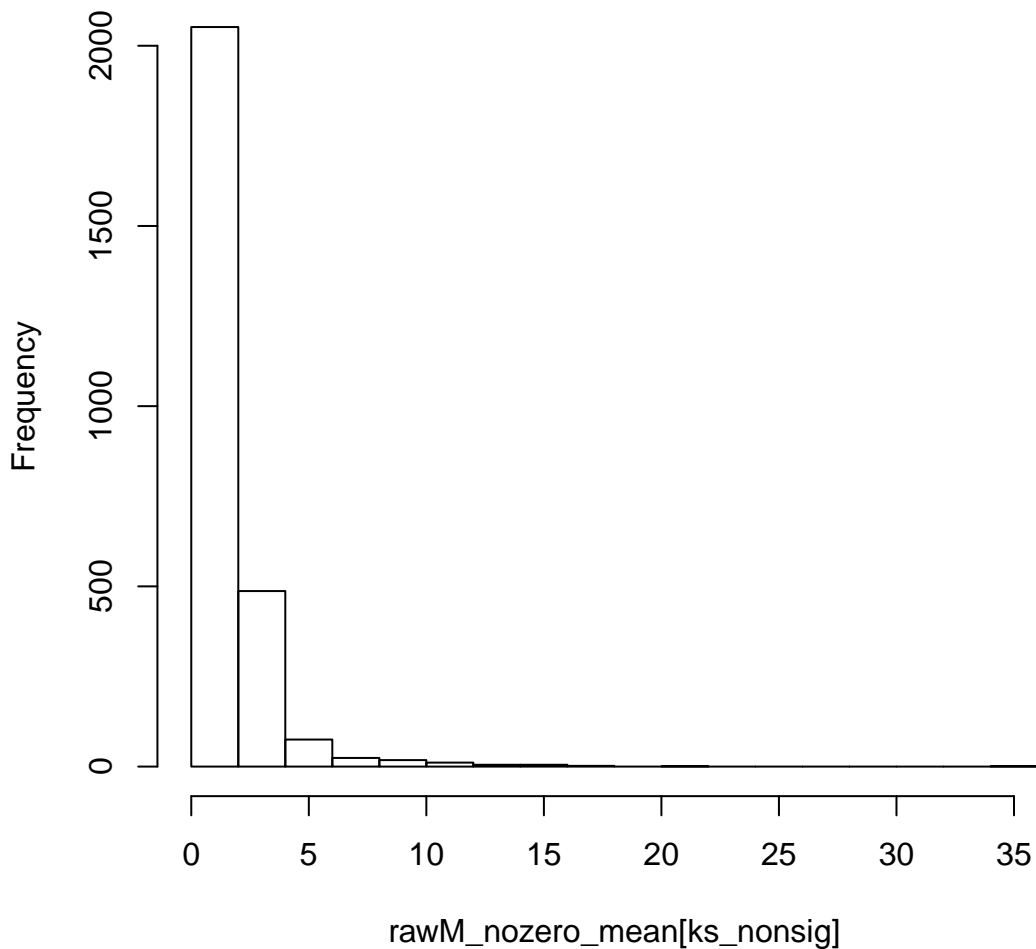
mean of nozero log-express of genes, ksless sig



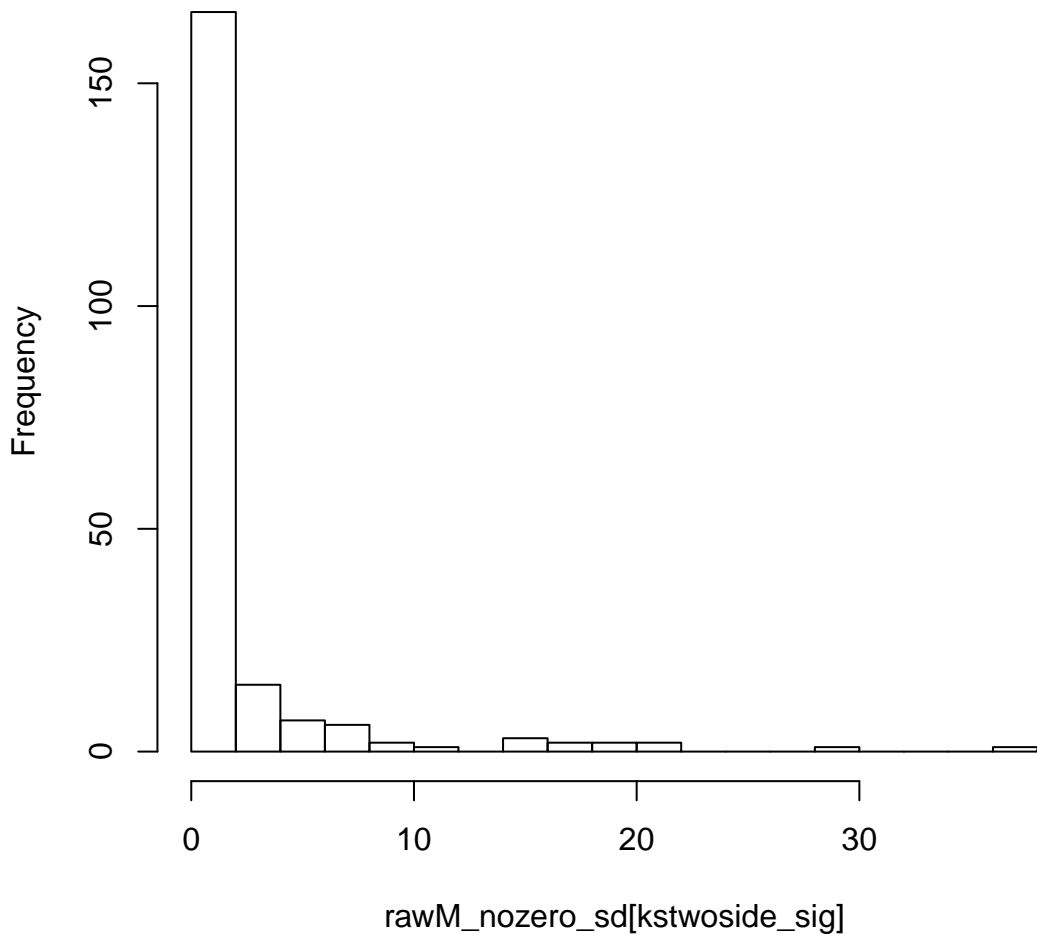
mean of nozero log-expres of genes,ksgreater sig



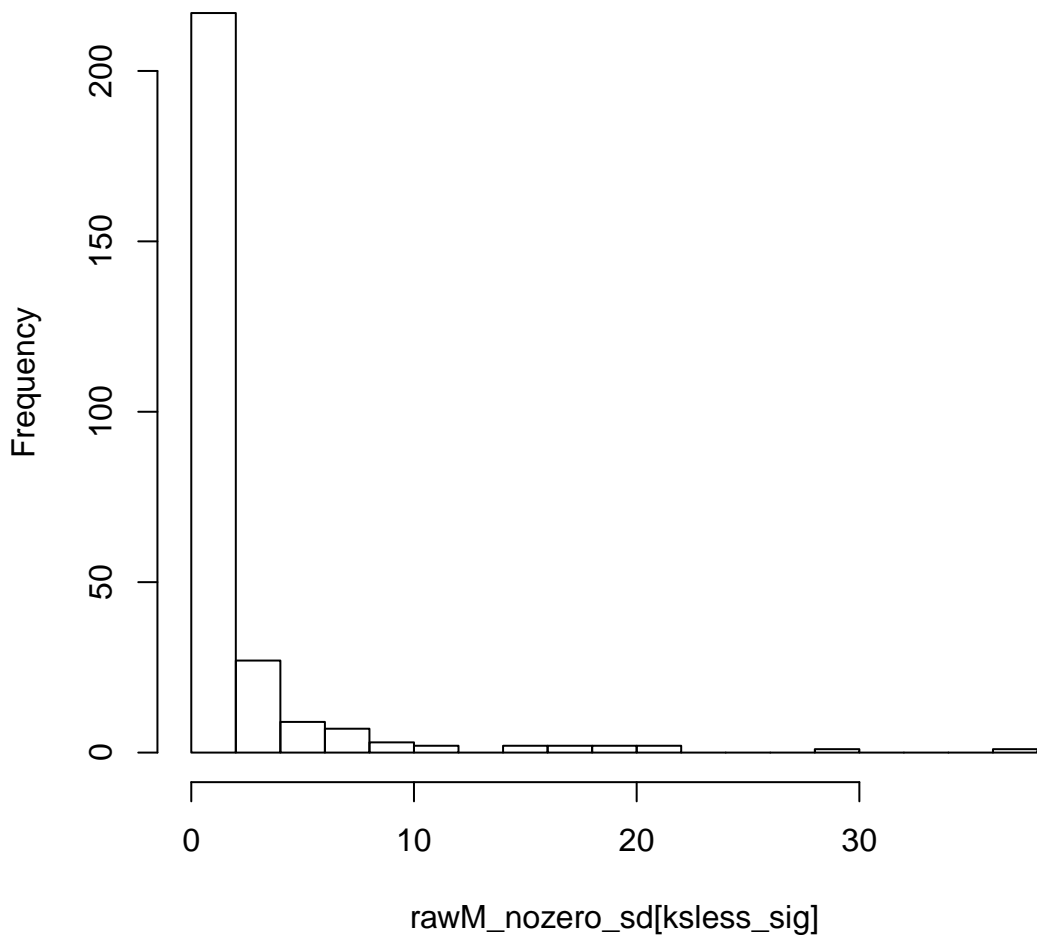
mean of nozero log-expres of genes,ks no sig



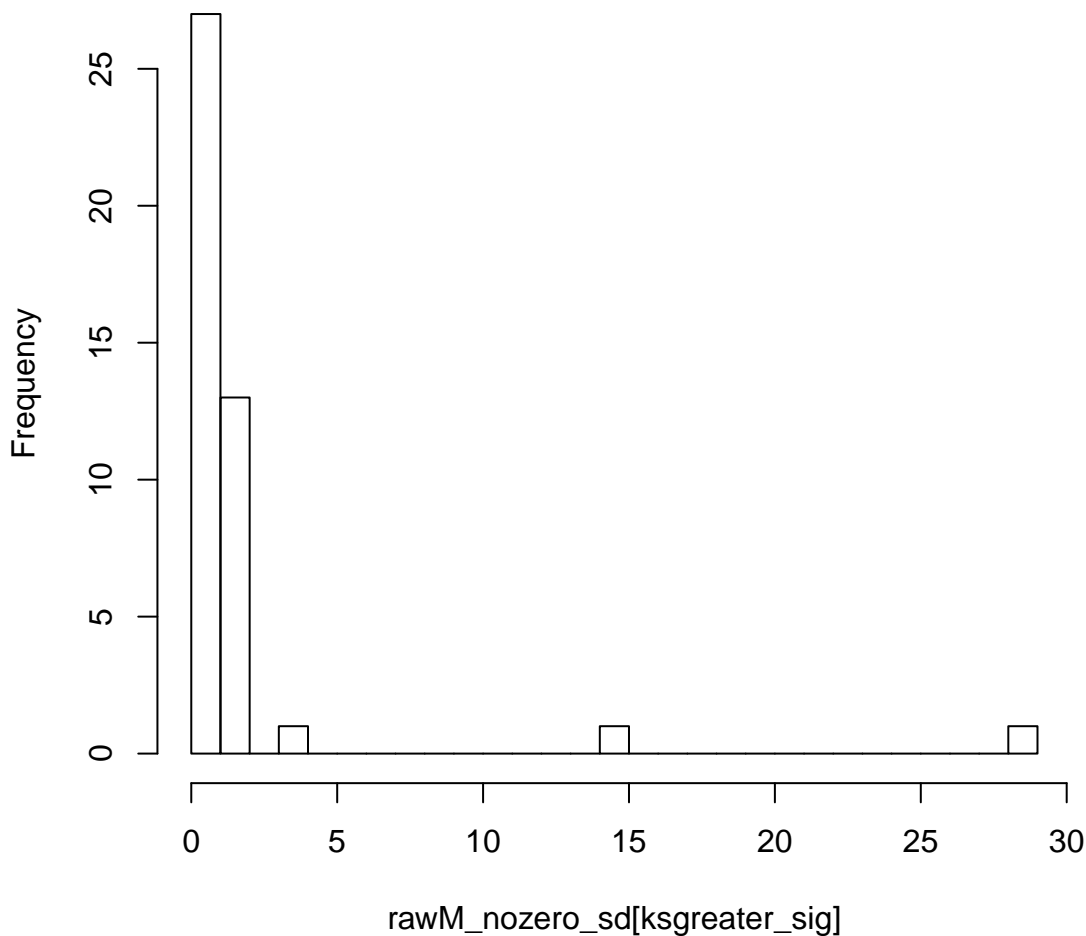
sd of nozero log-express of genes, kstwoside sig



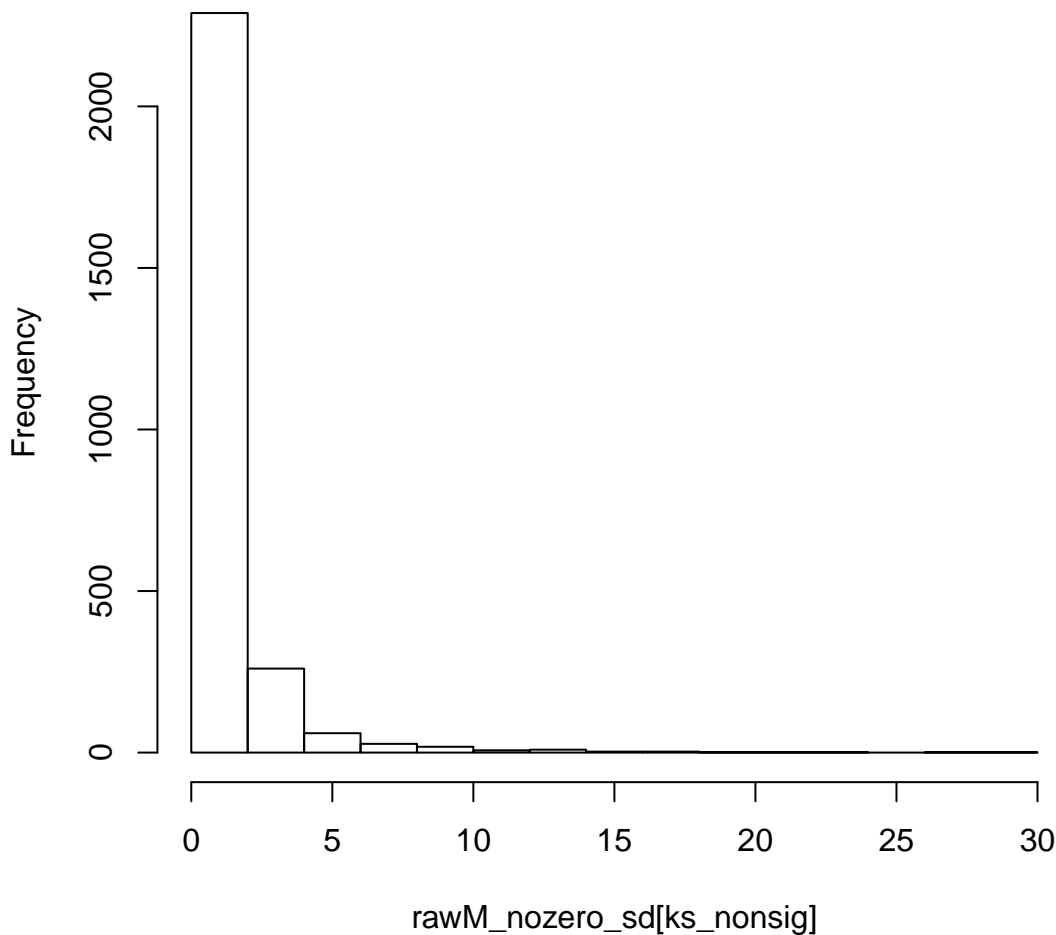
sd of nozero log-express of genes, ksless sig



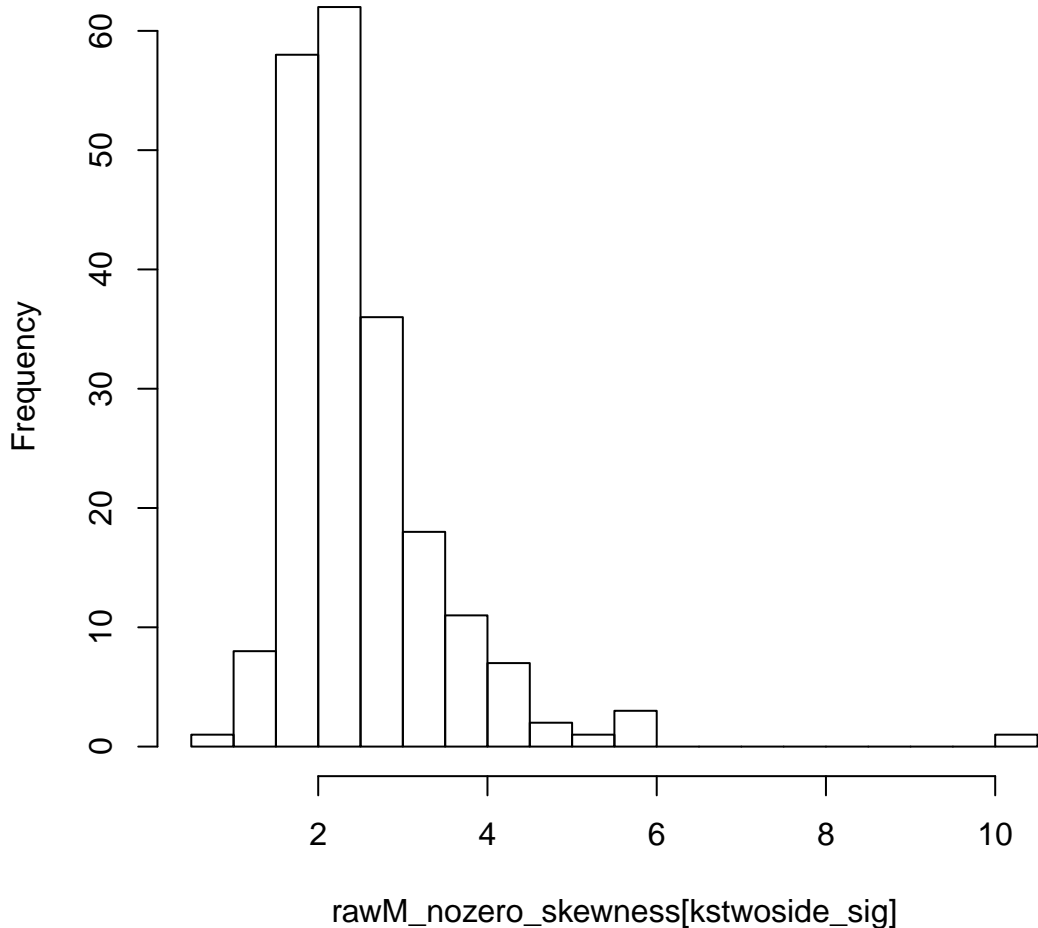
sd of nozero log-express of genes,ksgreater sig



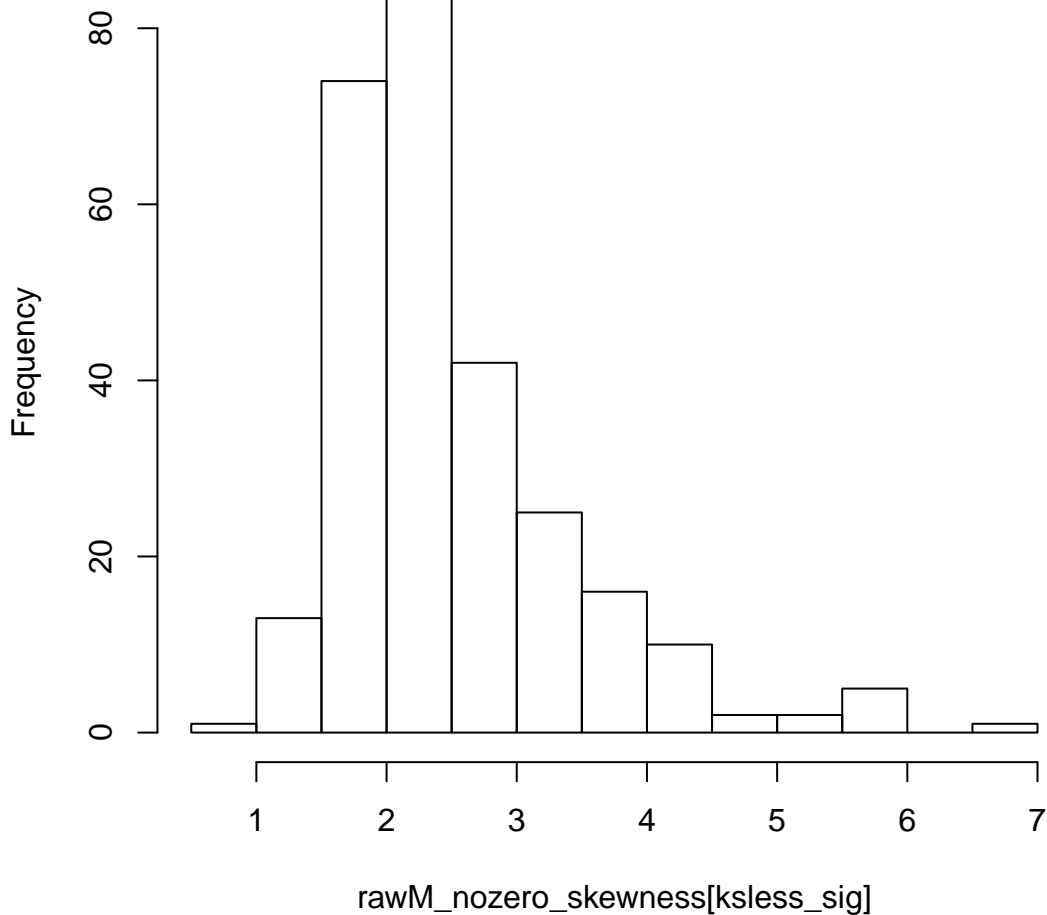
sd of nozero log-express of genes,ks no sig



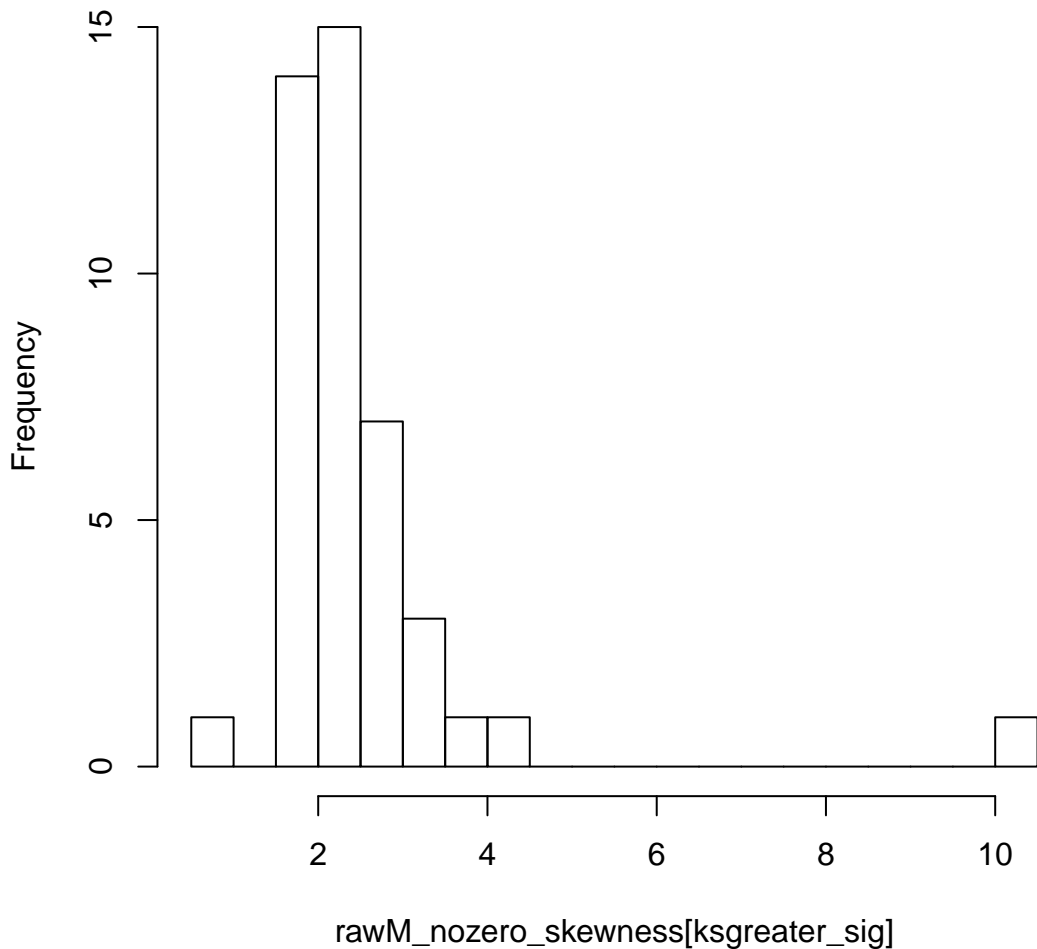
skewness of nozero log-express of genes, kstvoside sig



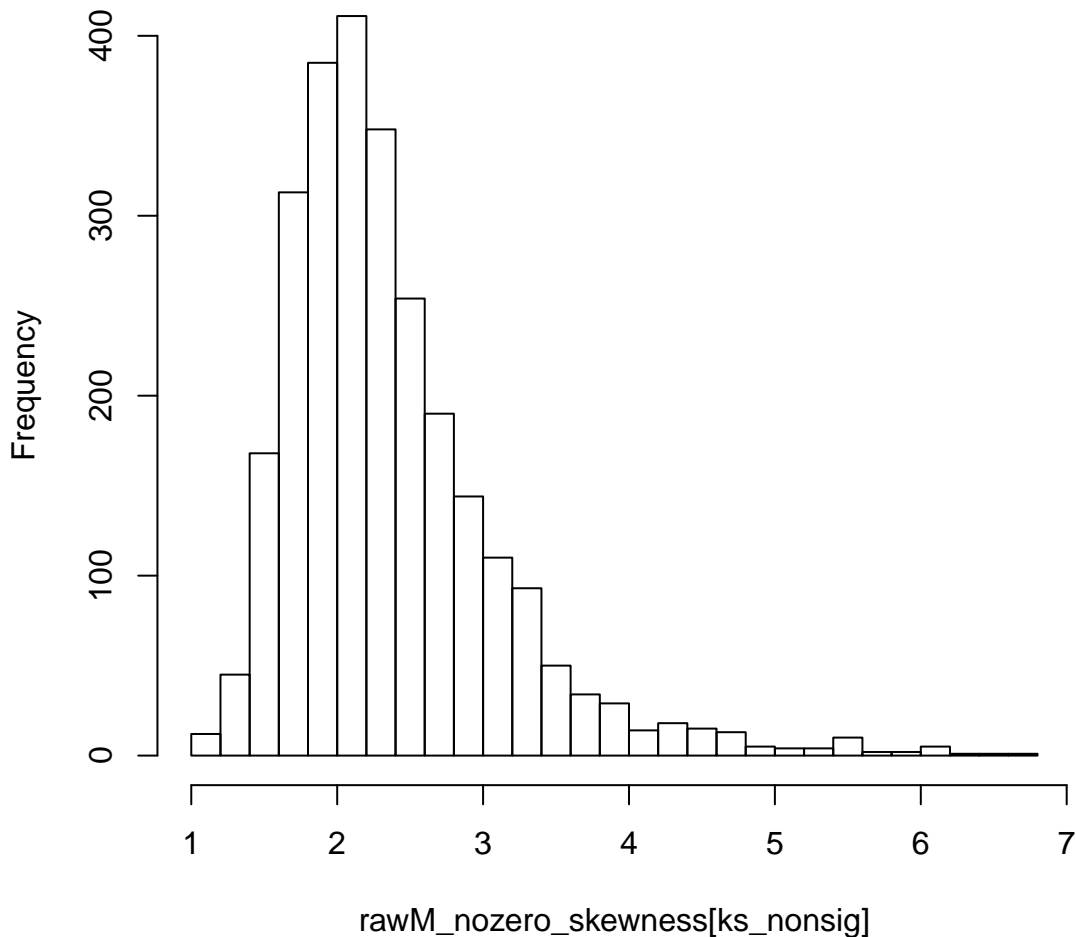
skewness of nozero log-express of genes, ksless sig



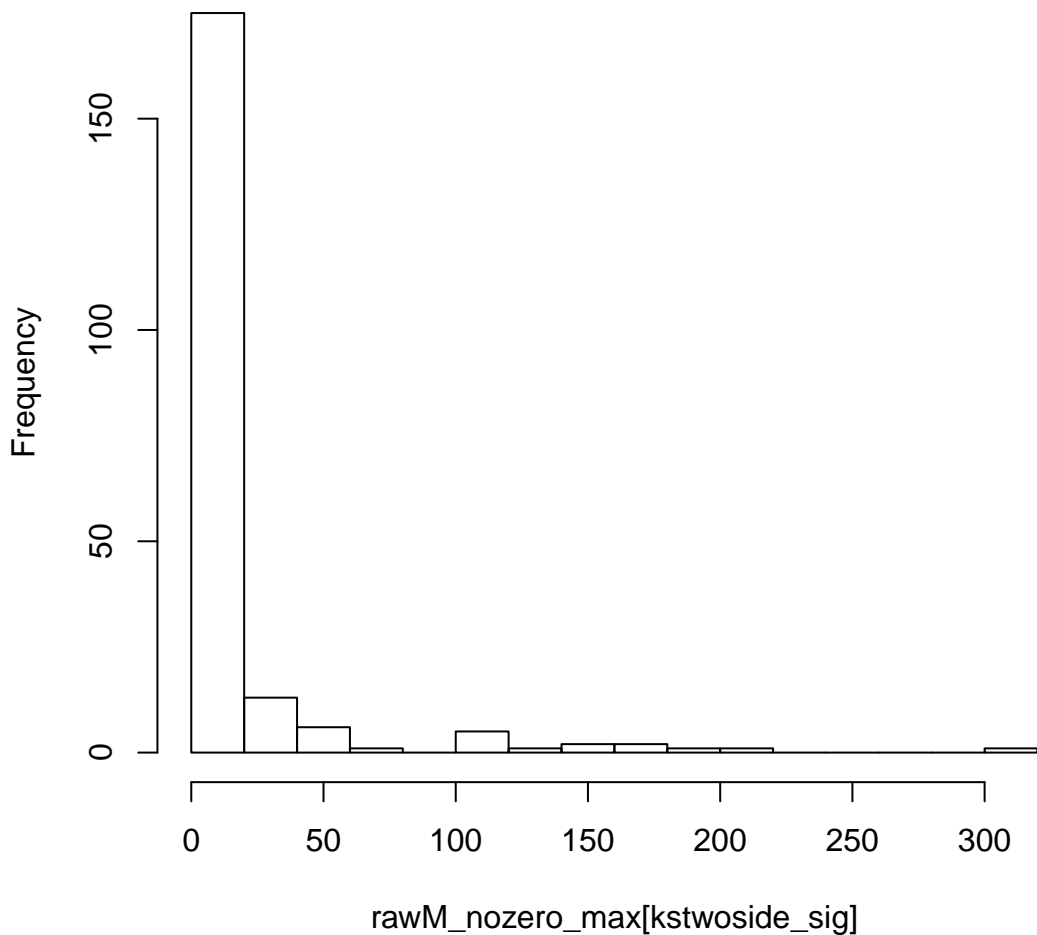
skewness of nozero log-express of genes,ksgreater sig



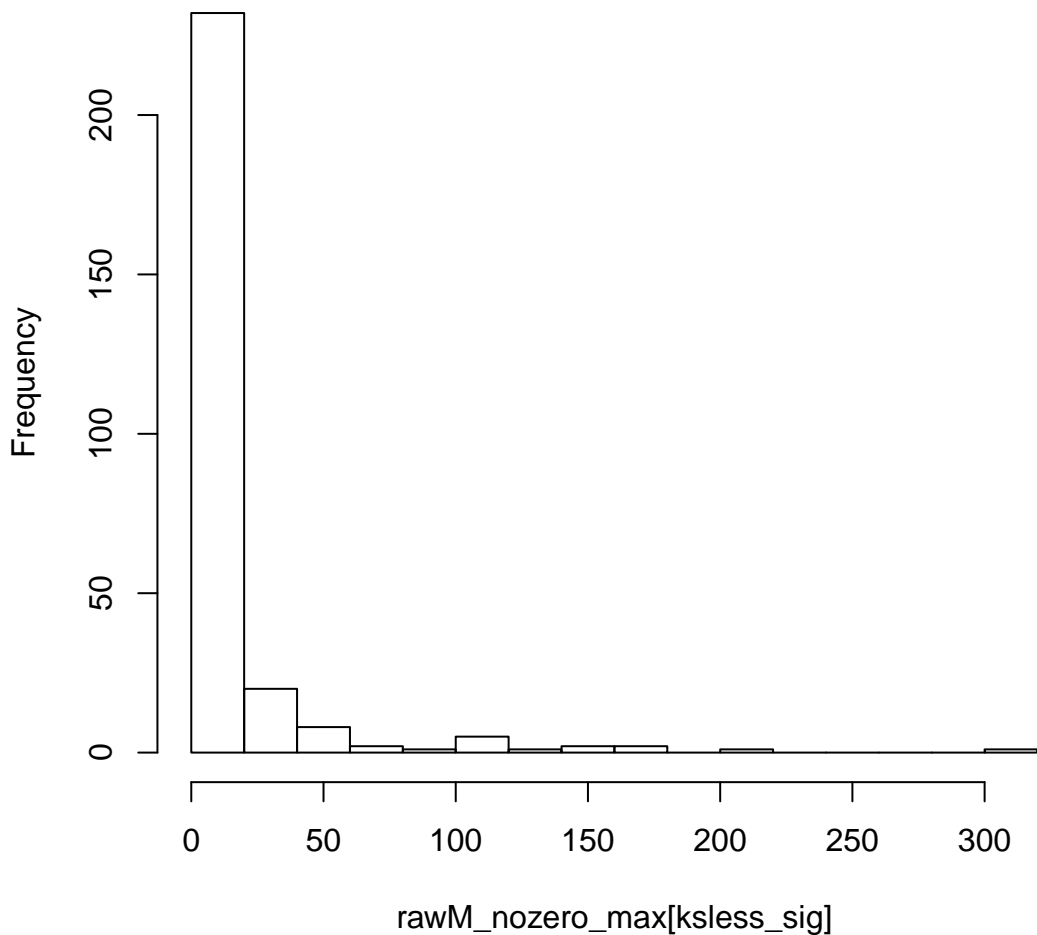
skewness of nozero log-express of genes,ks no sig



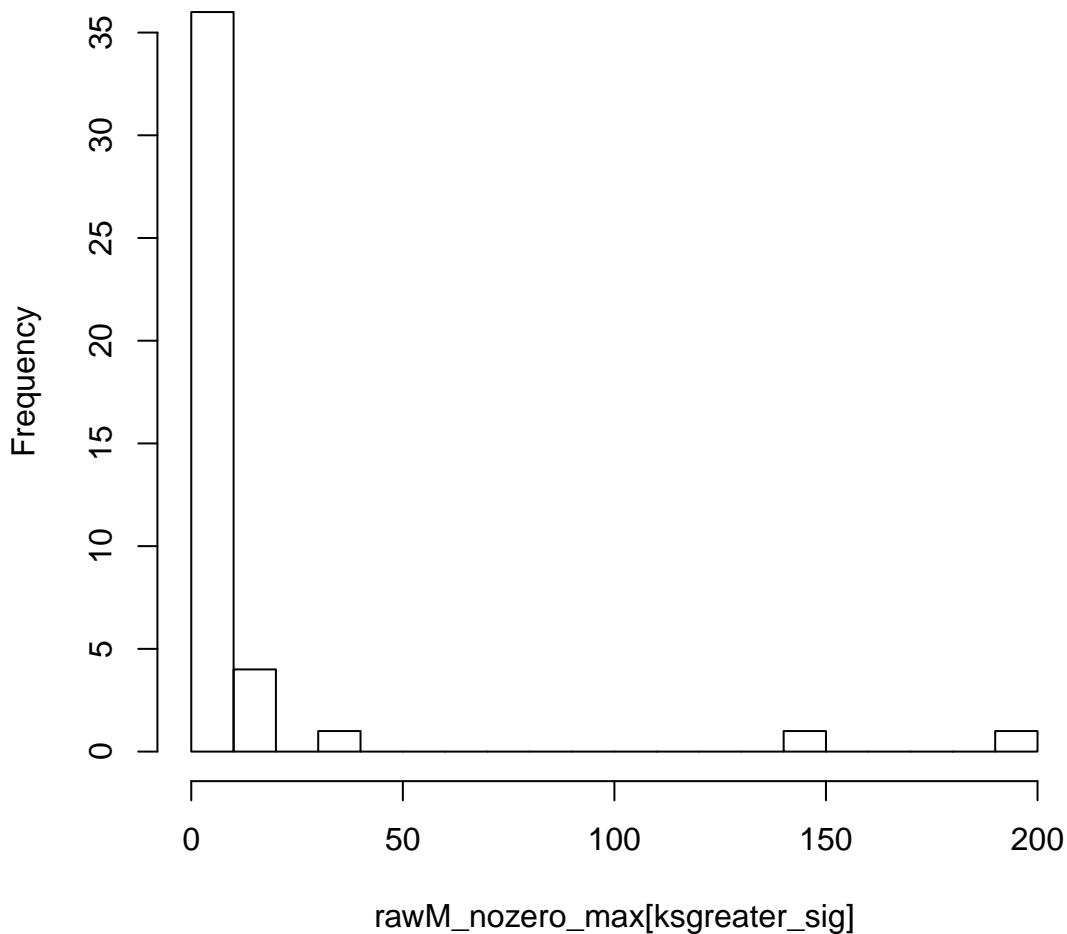
max of nozero log-express of genes, kstwside sig



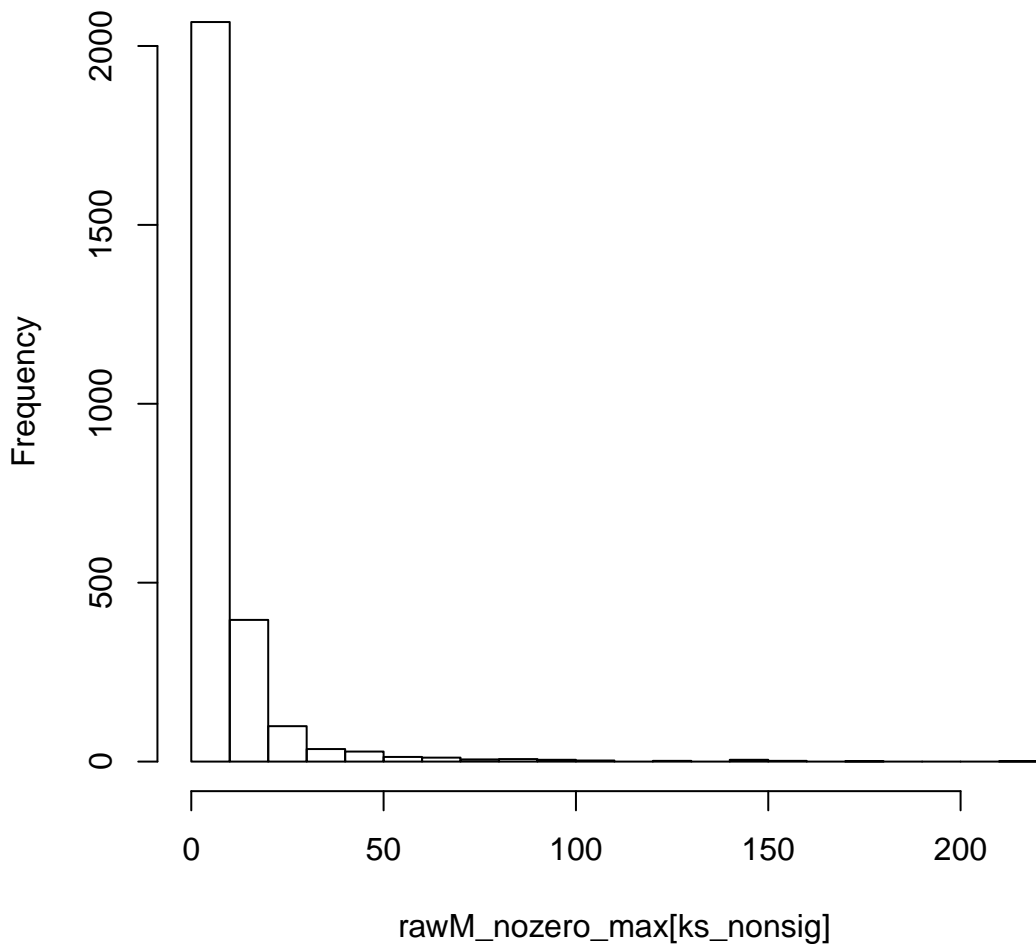
max of nozero log-express of genes, ksless sig



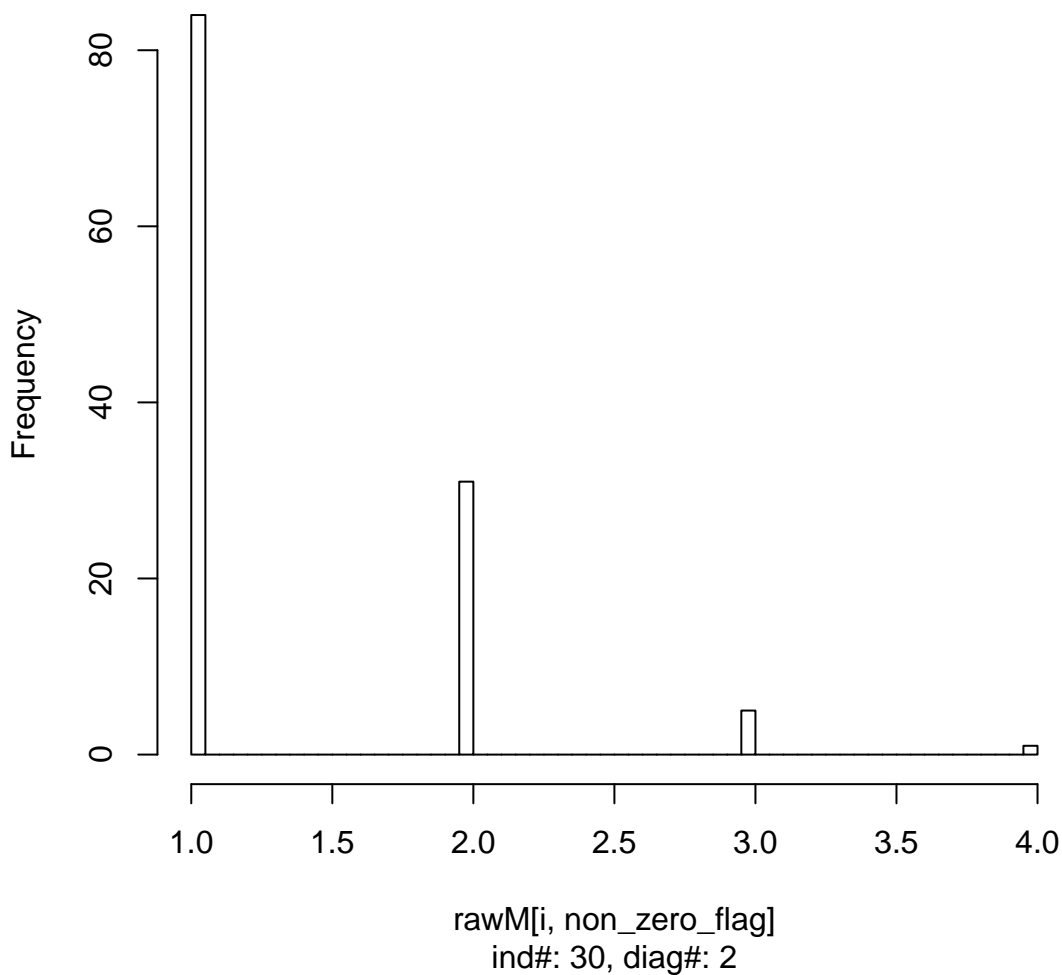
max of nozero log-express of genes,ksgreater sig



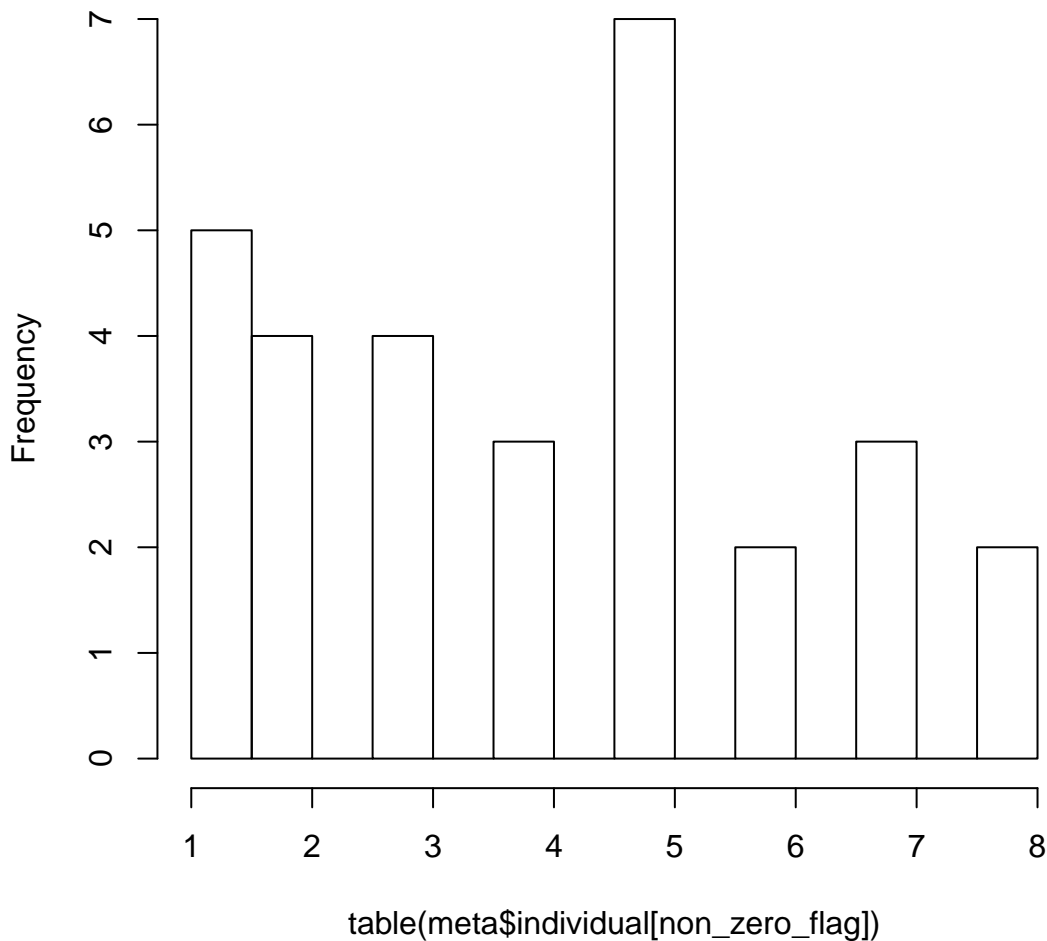
max of nozero log-express of genes,ks no sig



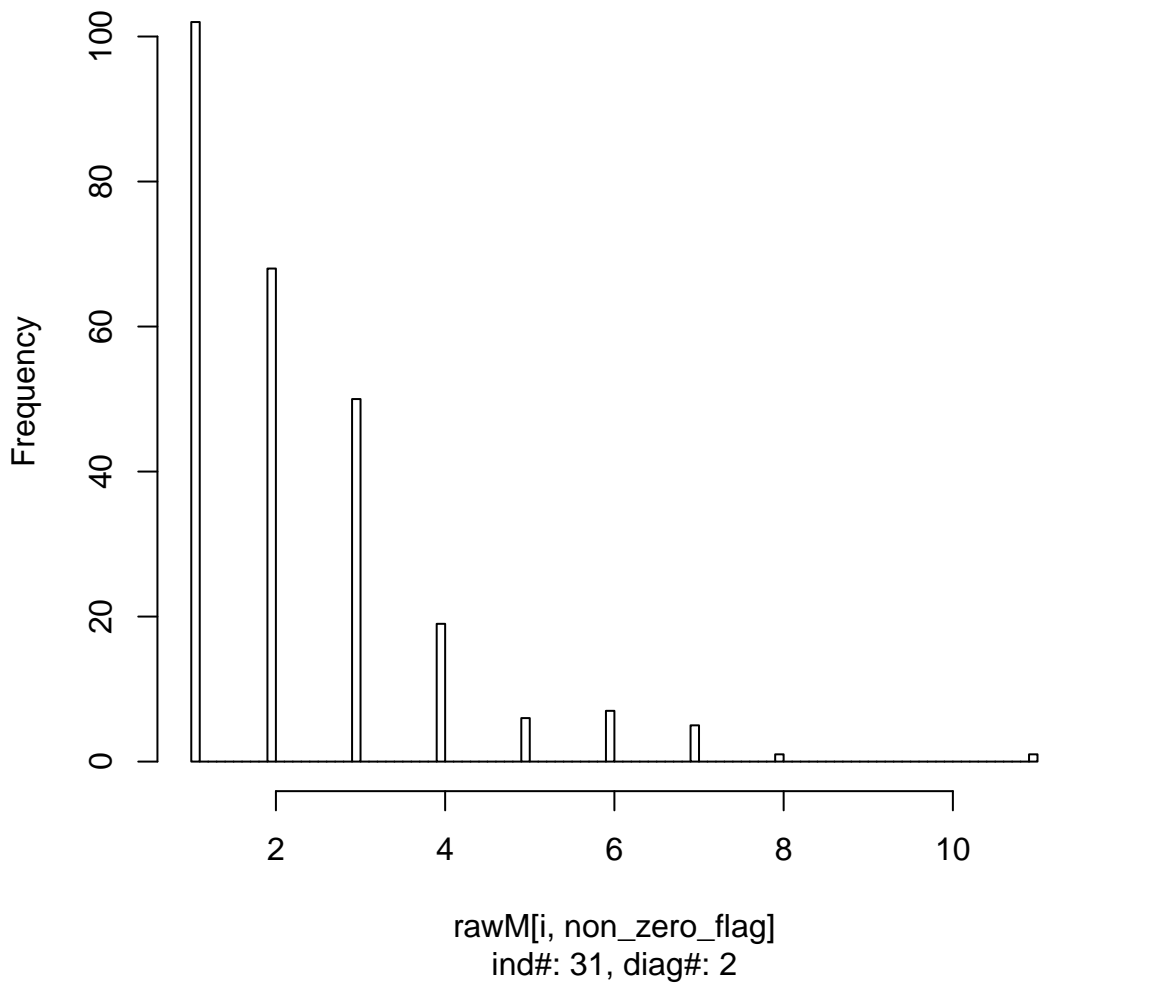
less sig: log expression of gene#15, pval ob=0.3522, non-zero nu



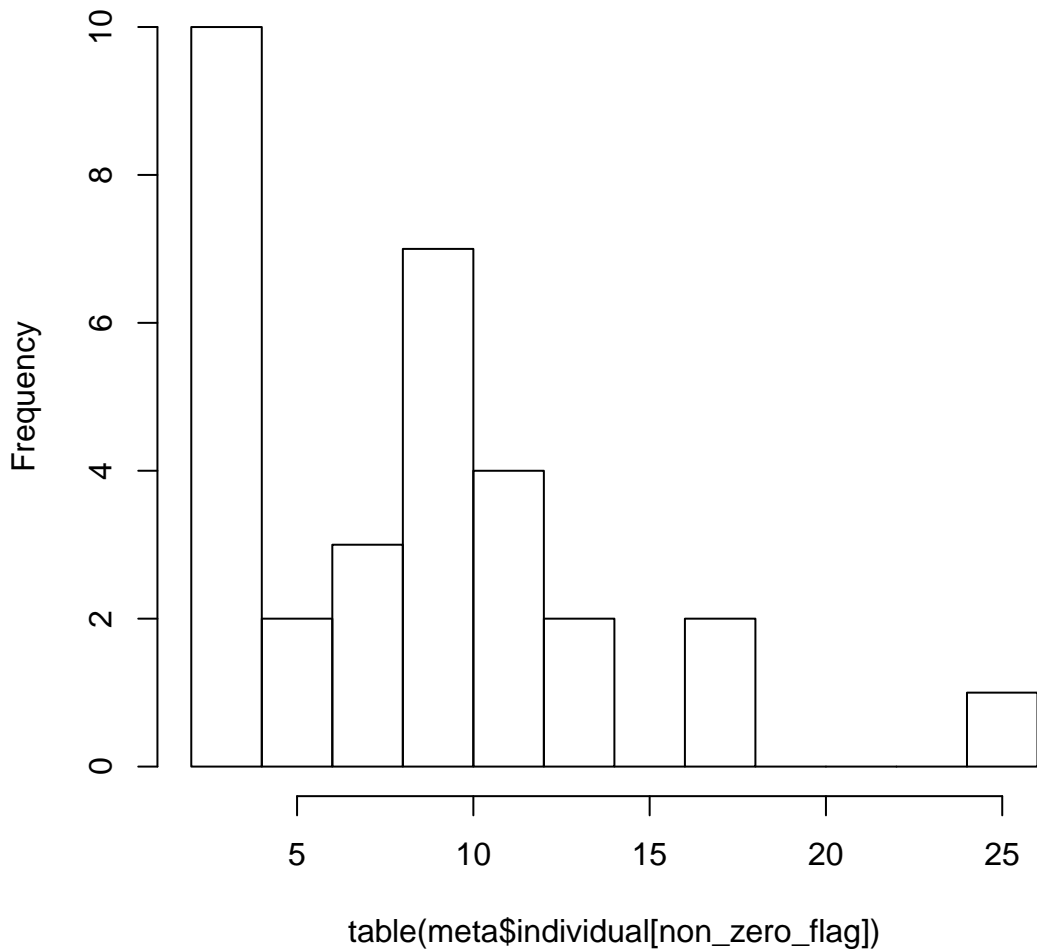
KSless sig: individual expression cell count of gene#15



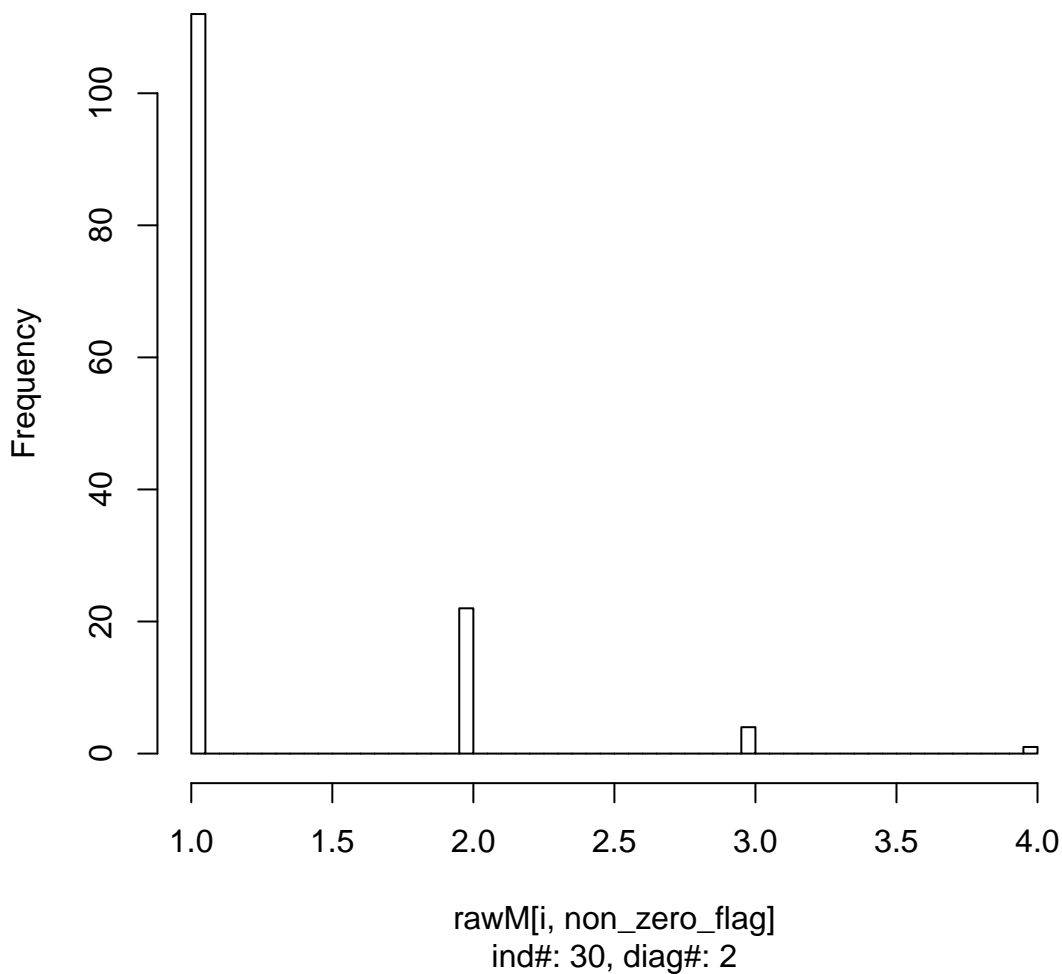
less sig: log expression of gene#16, pval ob=0.2021, non-zero nu



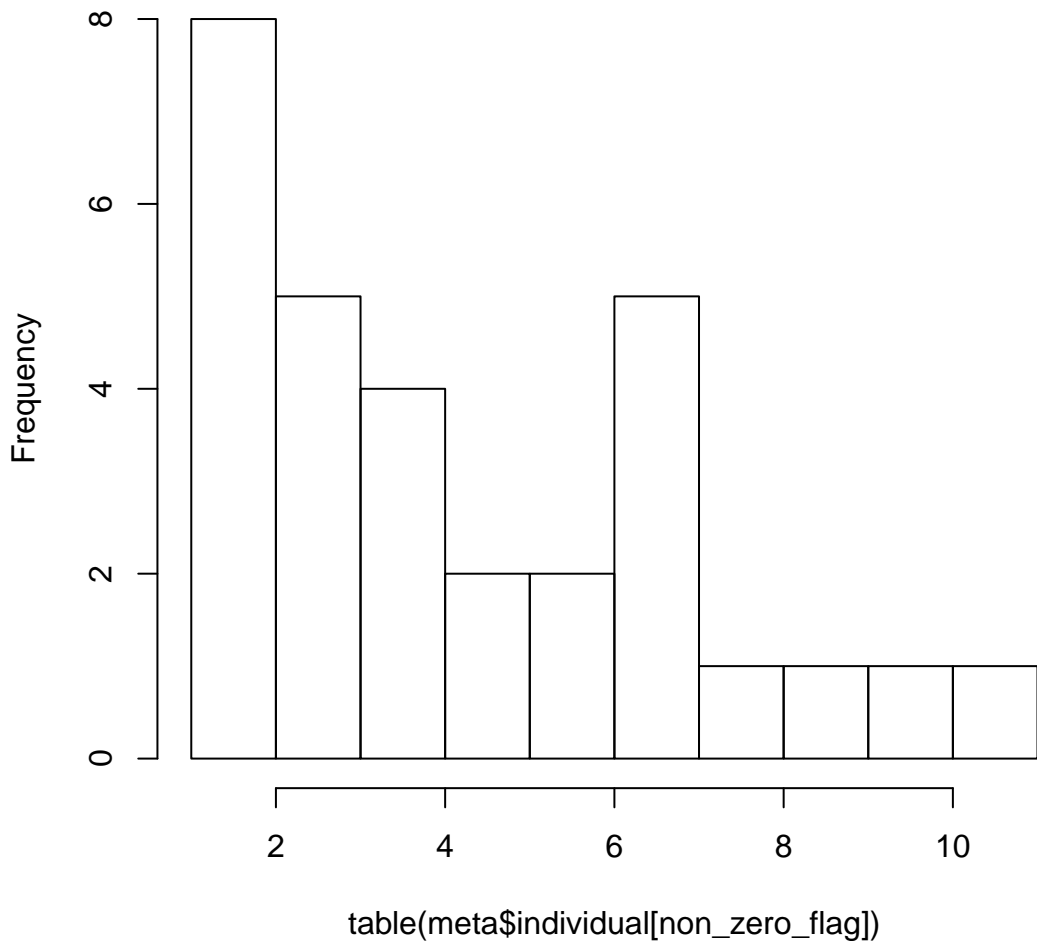
KSless sig: individual expression cell count of gene#16



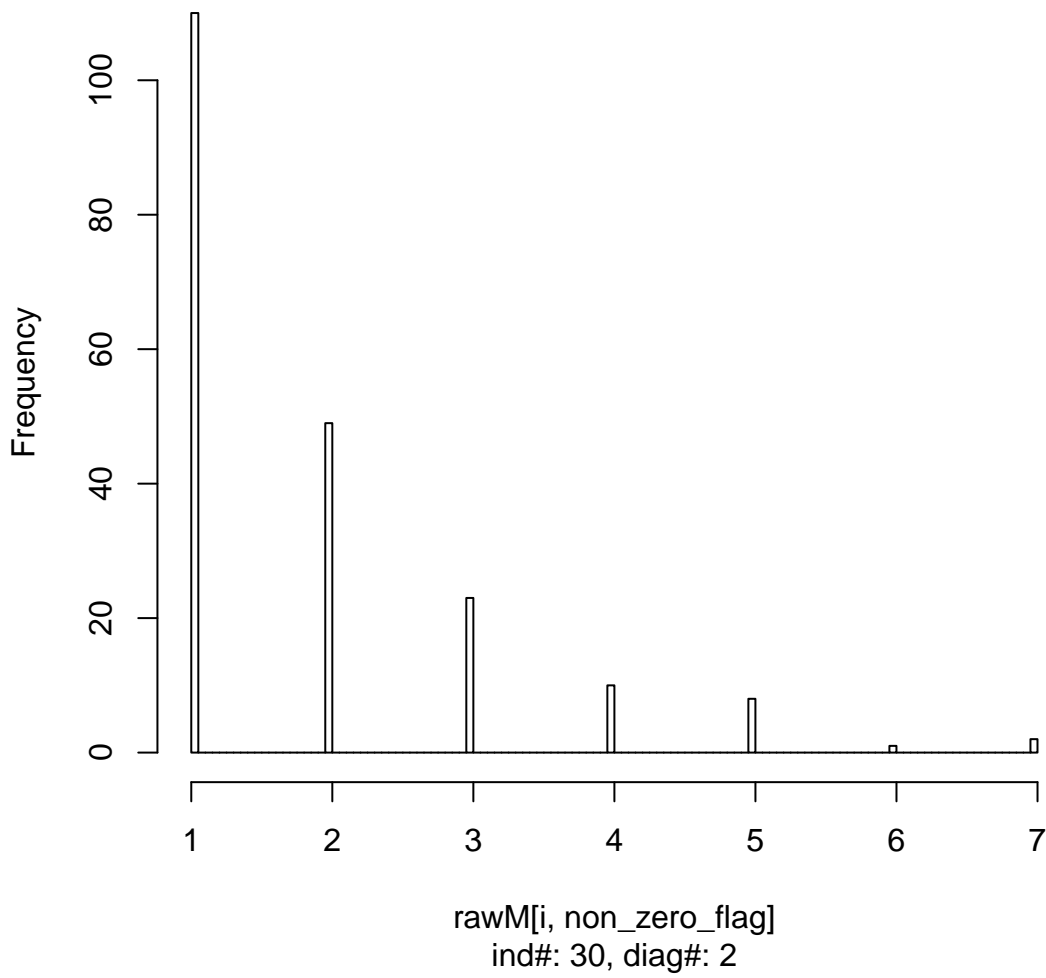
less sig: log expression of gene#25, pval ob=0.8465, non-zero nu



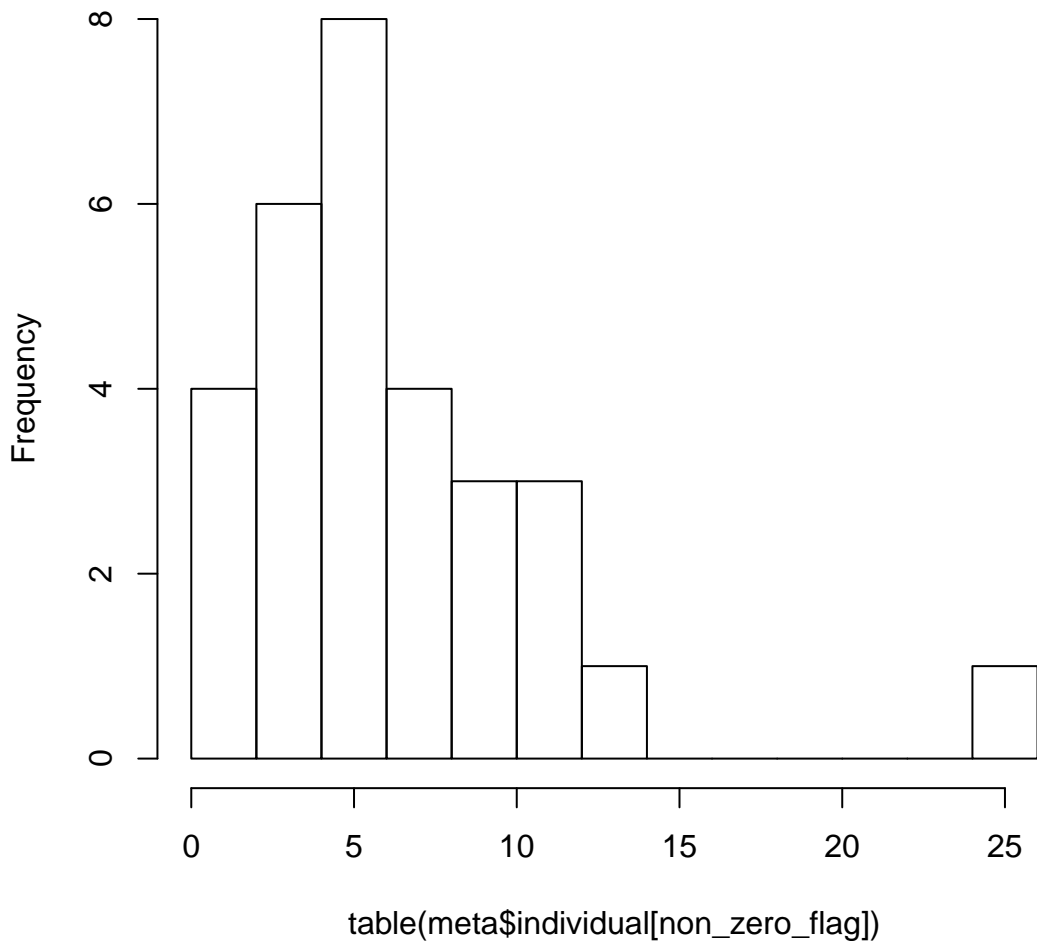
KSless sig: individual expression cell count of gene#25



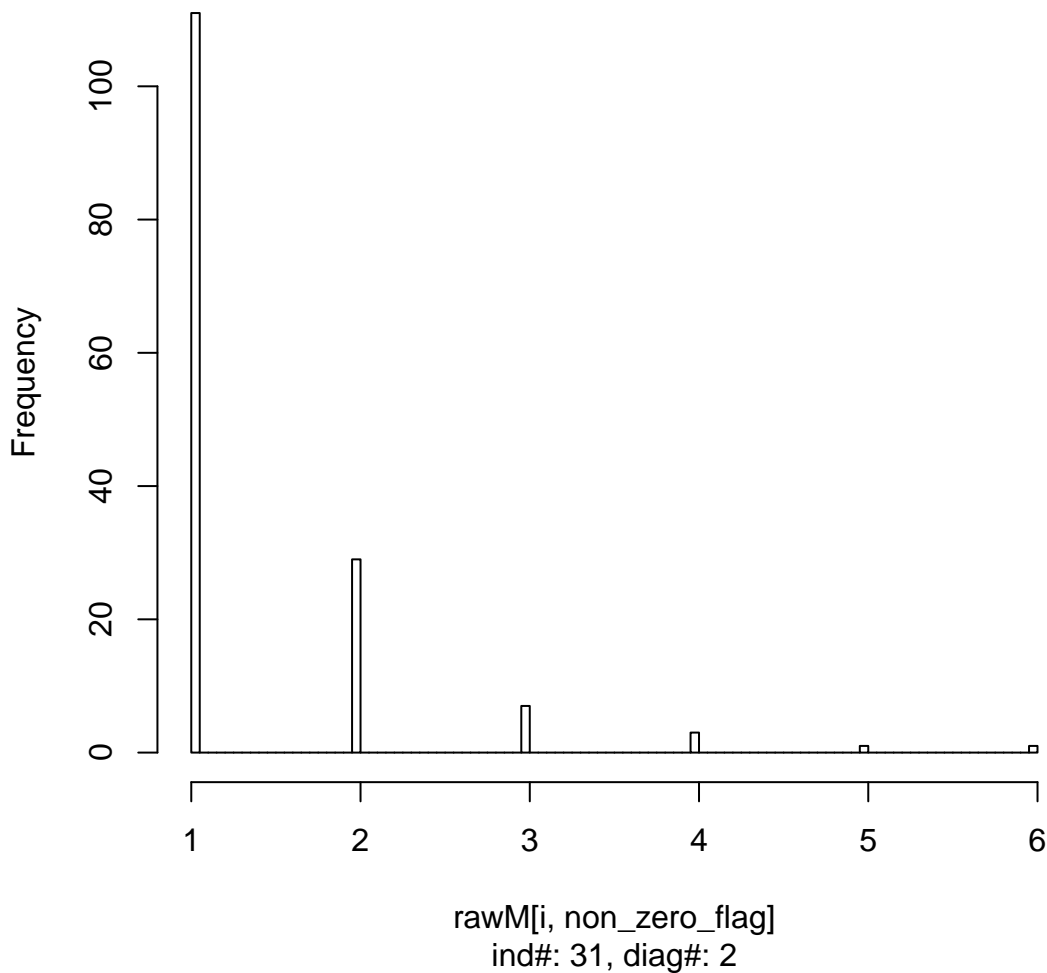
less sig: log expression of gene#28, pval ob=0.3852, non-zero nu



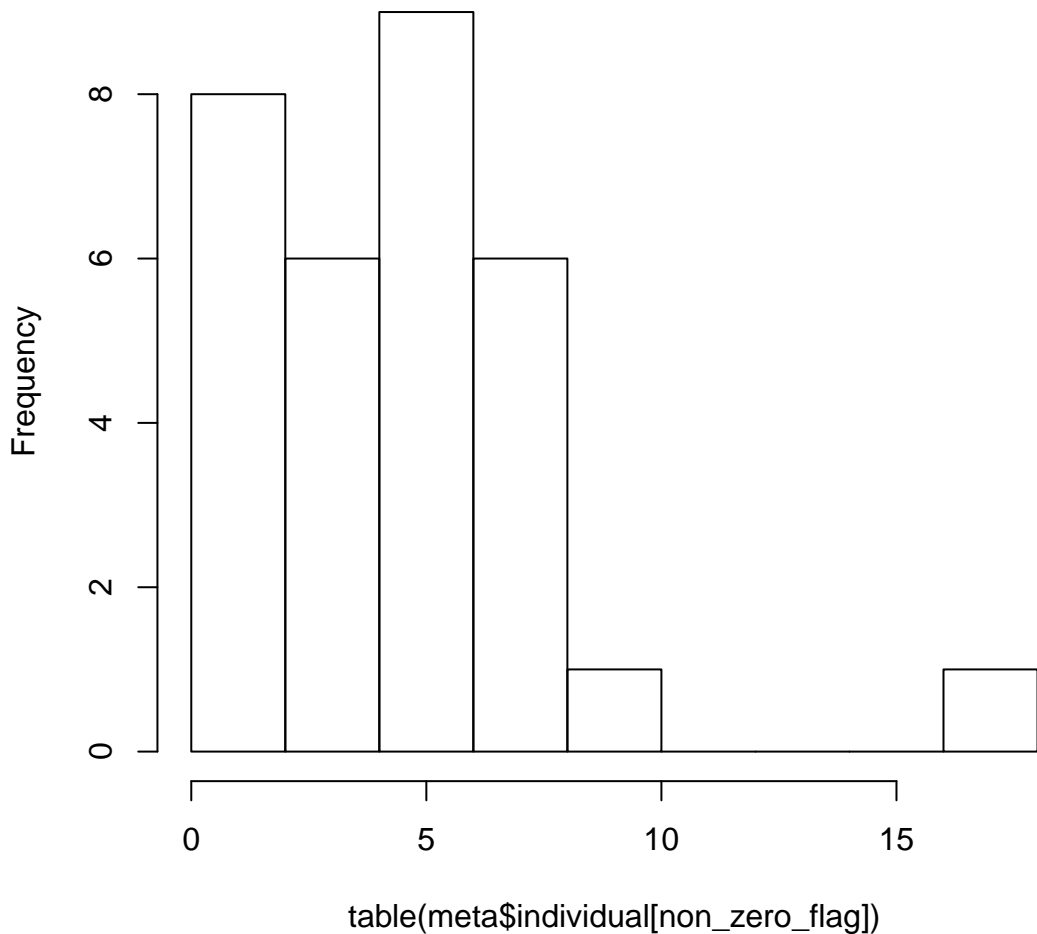
KSless sig: individual expression cell count of gene#28



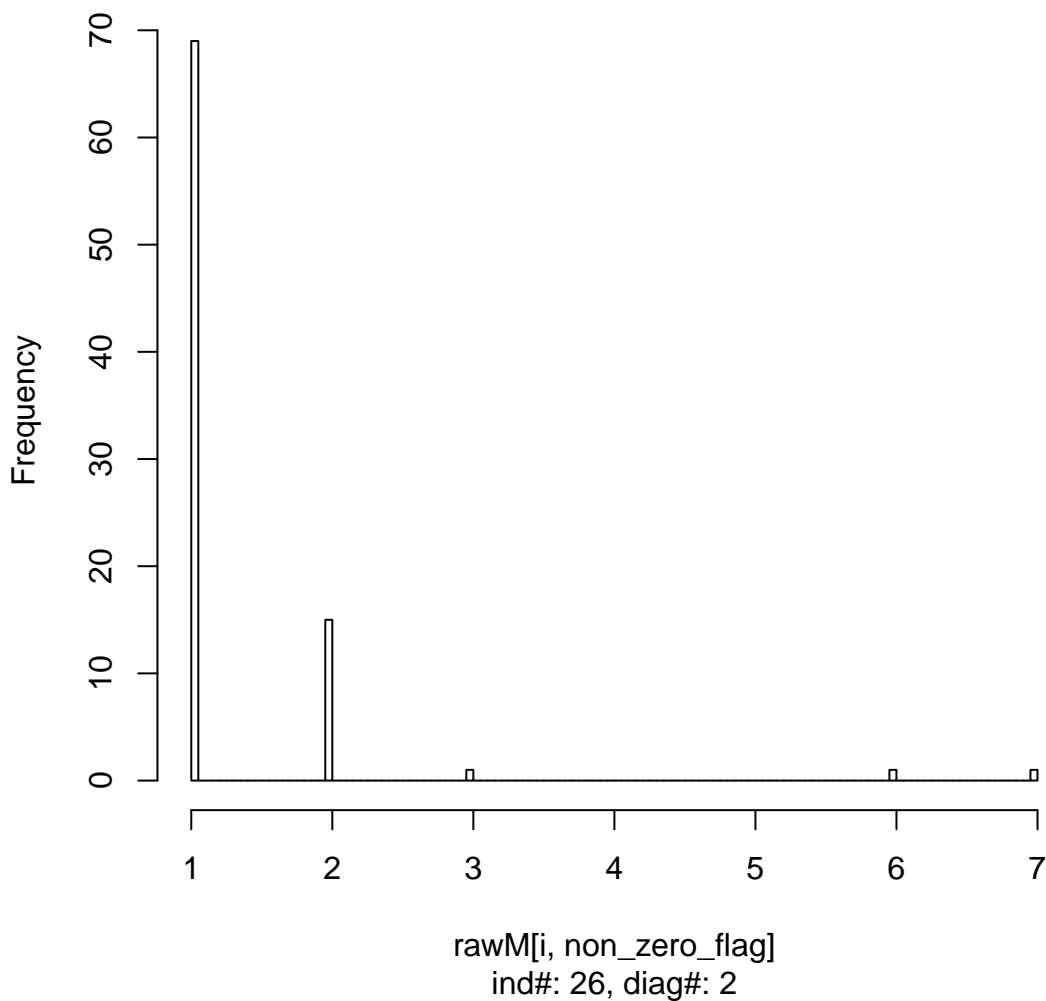
less sig: log expression of gene#47, pval ob=0.5429, non-zero nu



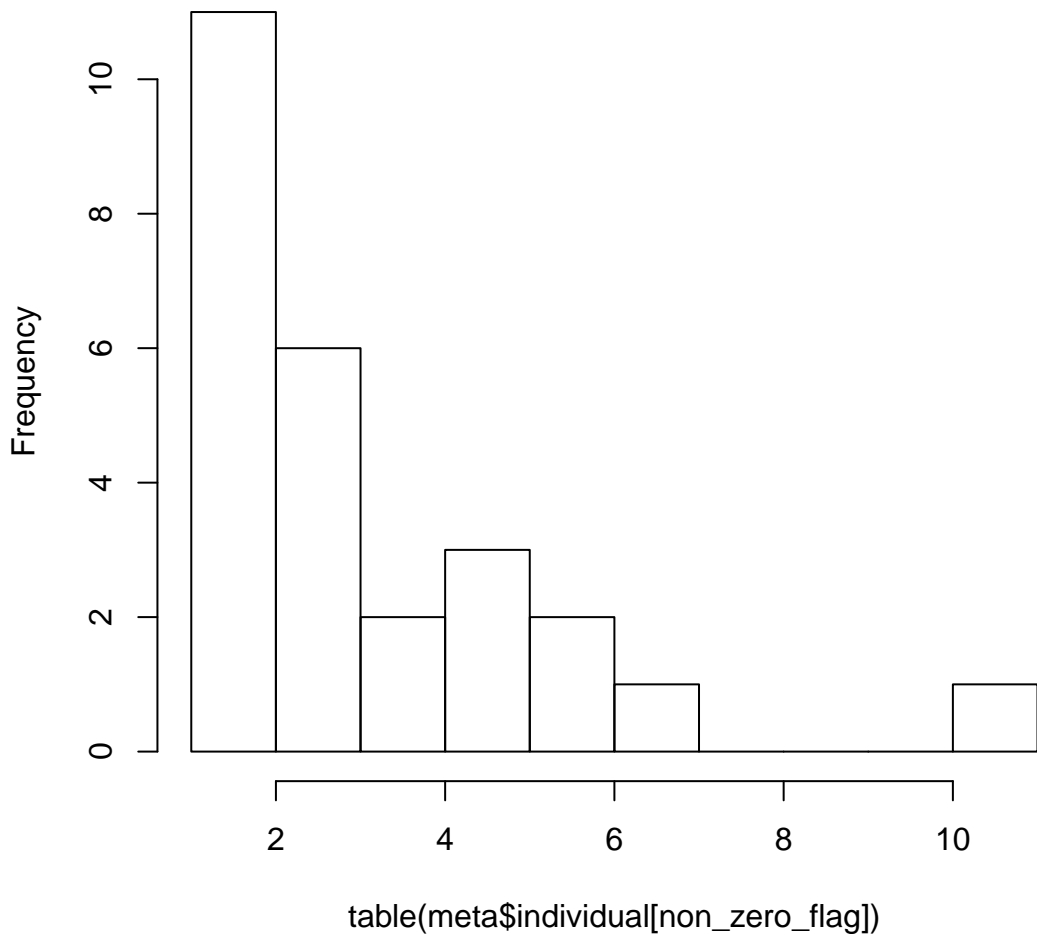
KSless sig: individual expression cell count of gene#47



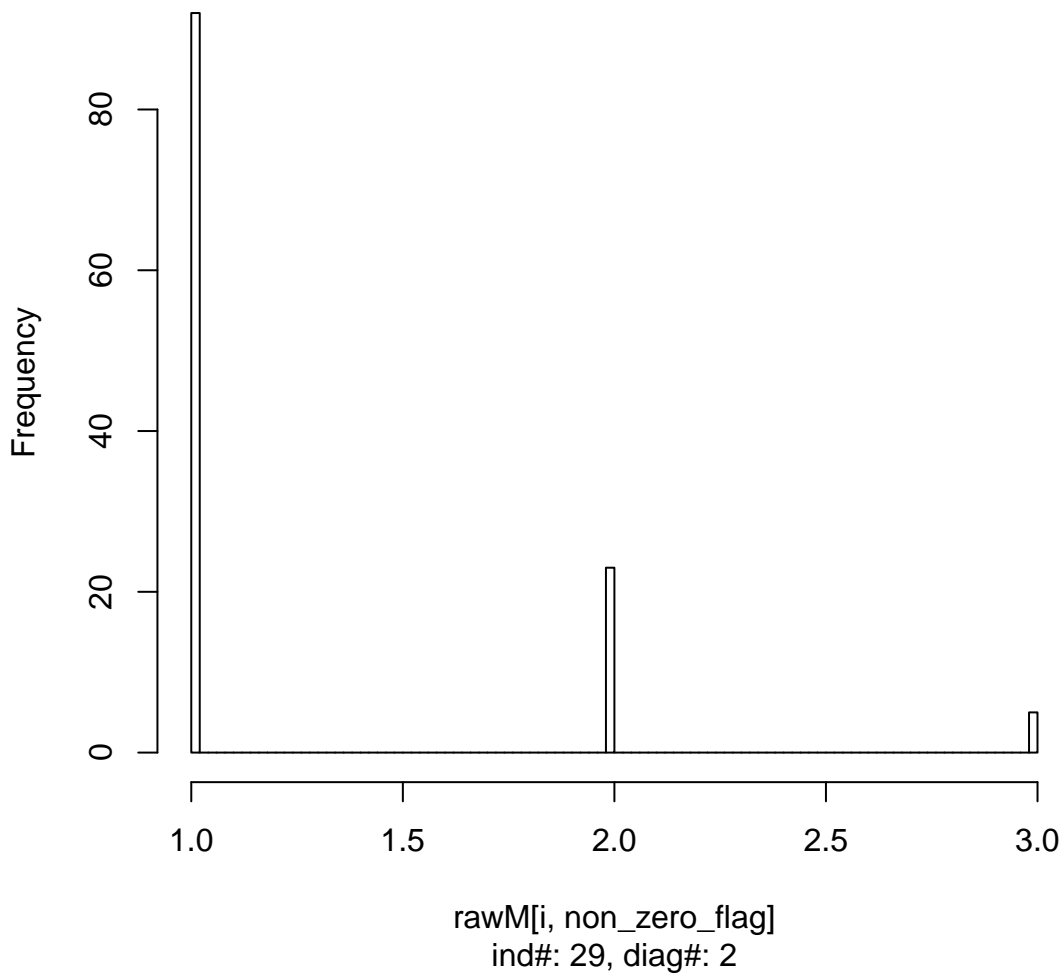
Sless sig: log expression of gene#53, pval ob=0.018, non-zero nu



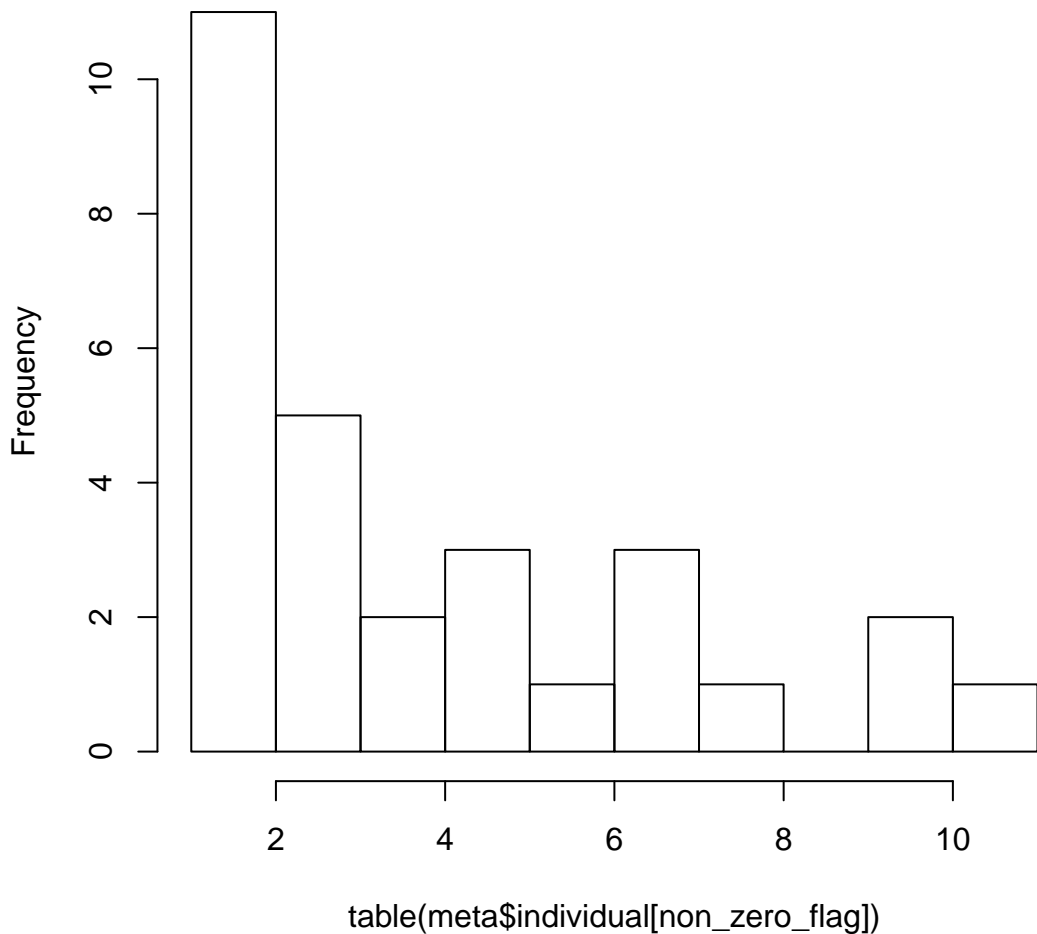
KSless sig: individual expression cell count of gene#53



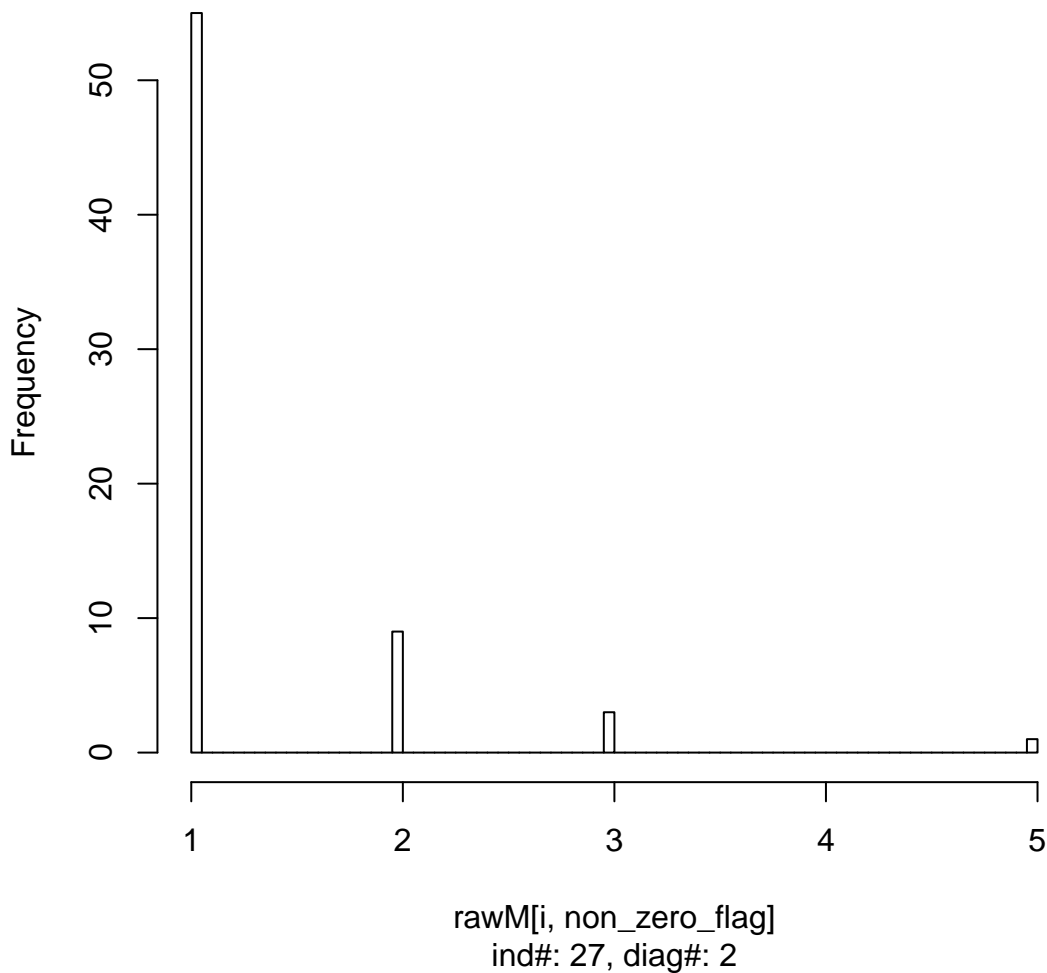
less sig: log expression of gene#70, pval ob=0.0014, non-zero nu



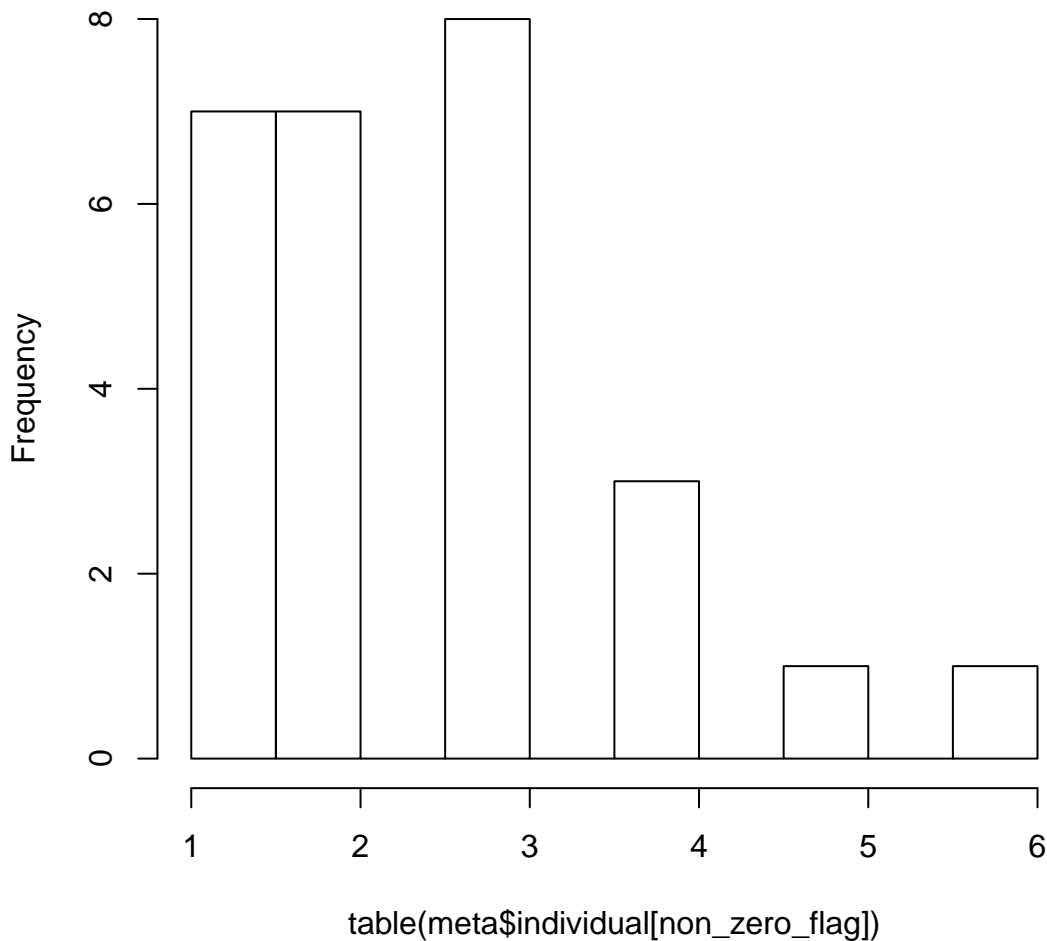
KSless sig: individual expression cell count of gene#70



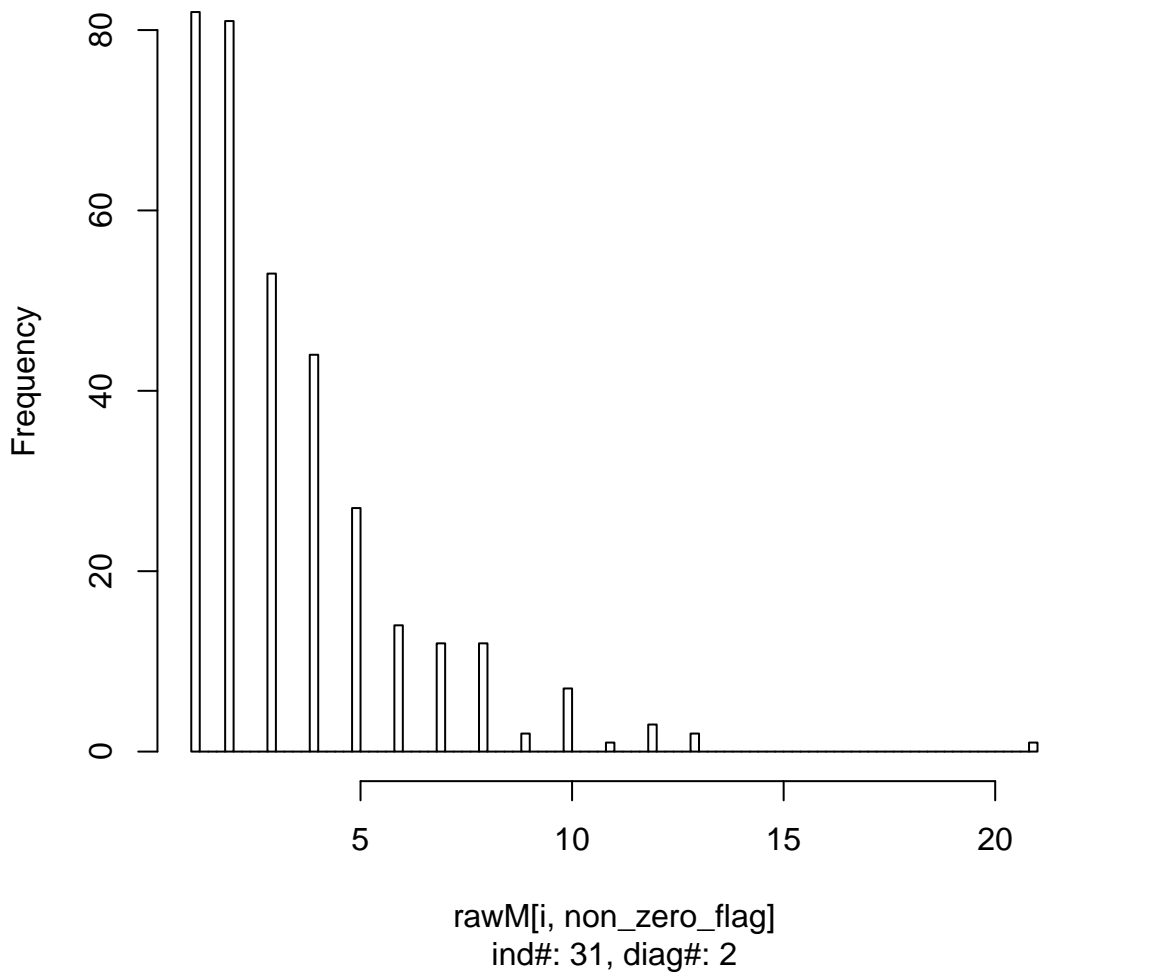
less sig: log expression of gene#83, pval ob=0.8131, non-zero n



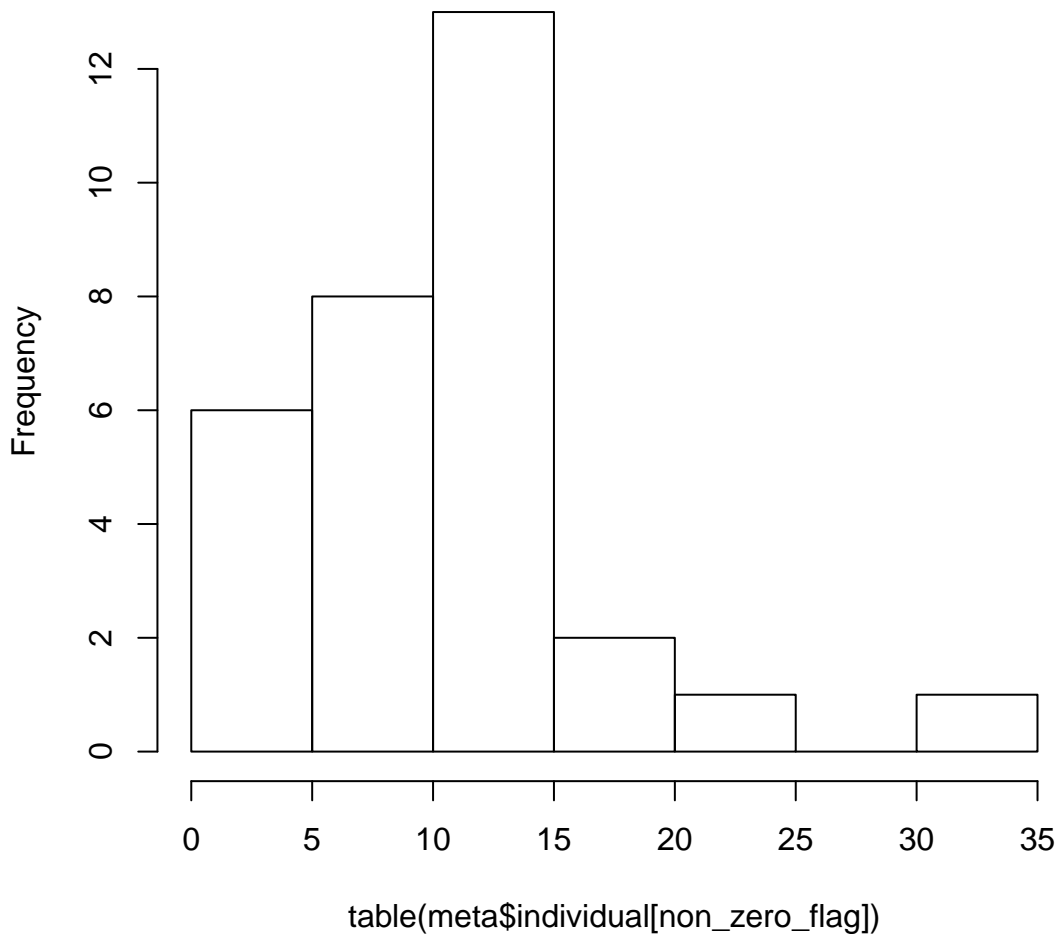
KSless sig: individual expression cell count of gene#83



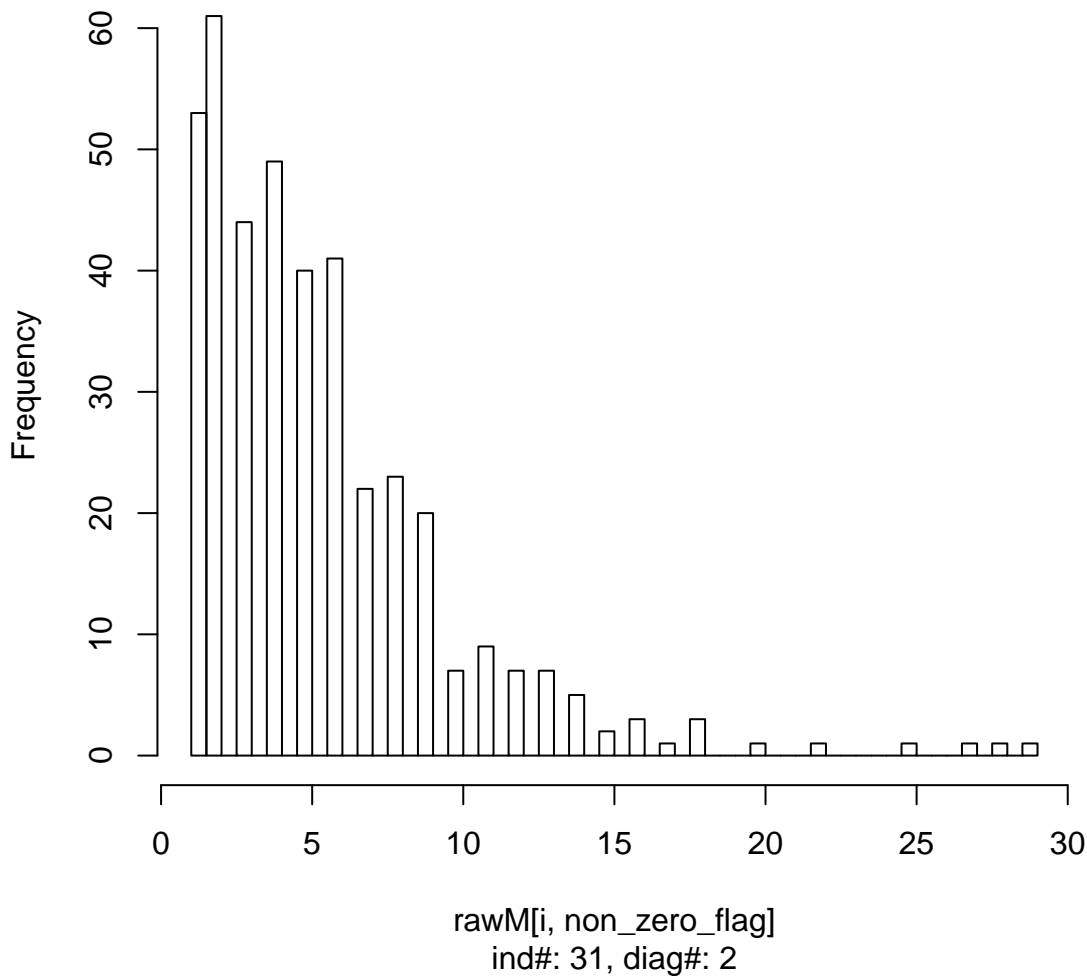
less sig: log expression of gene#85, pval ob=0.0793, non-zero nu



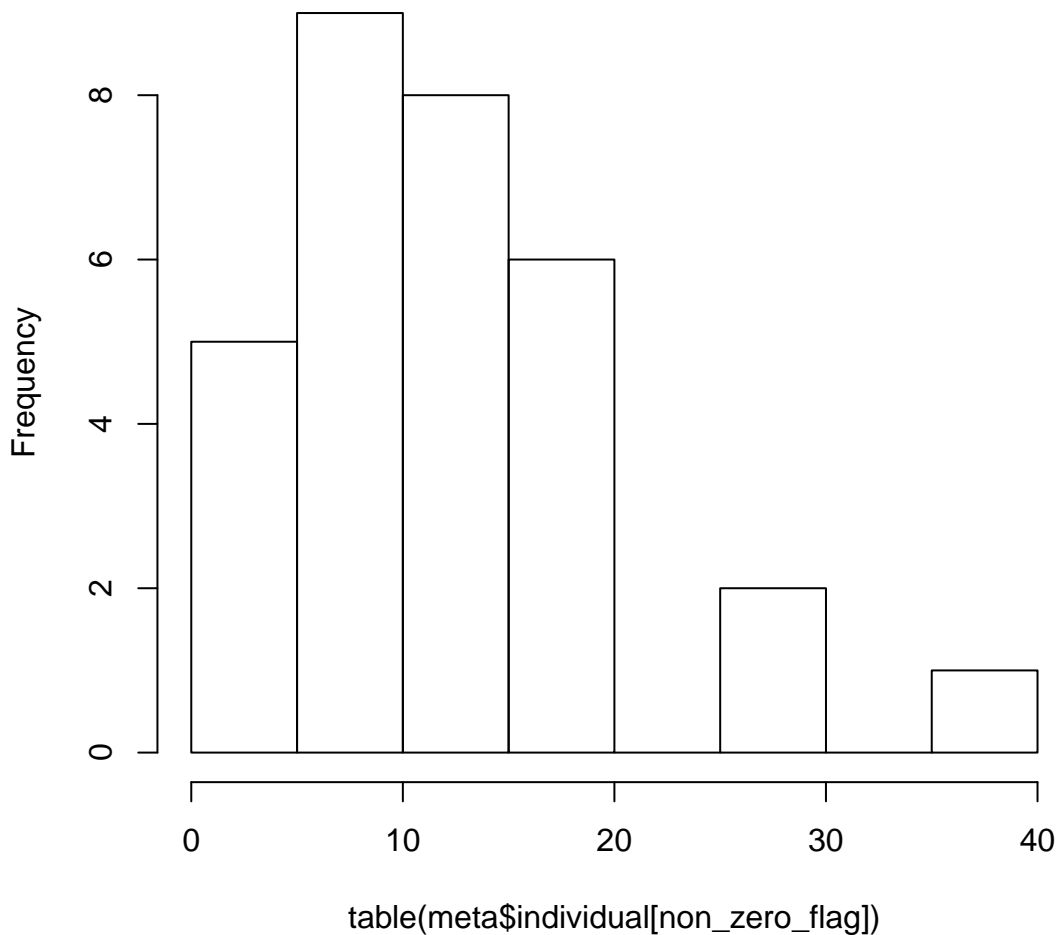
KSless sig: individual expression cell count of gene#85



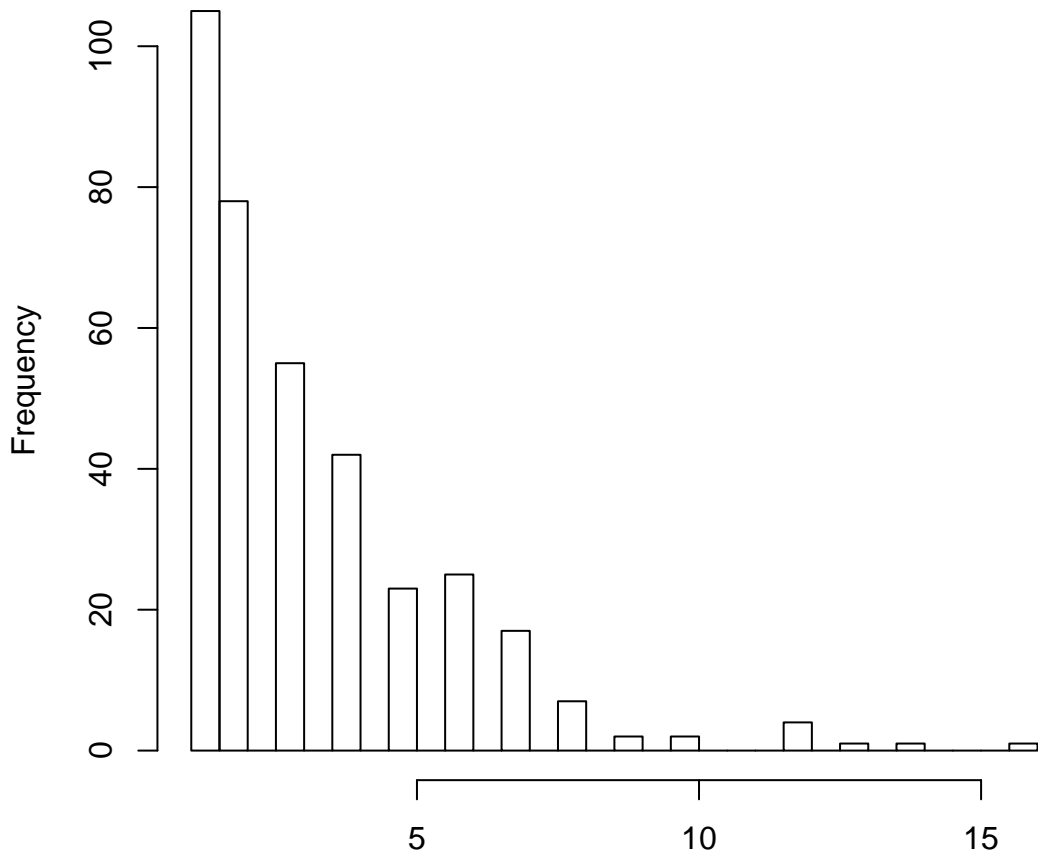
less sig: log expression of gene#99, pval ob=0.1446, non-zero nu



KSless sig: individual expression cell count of gene#99



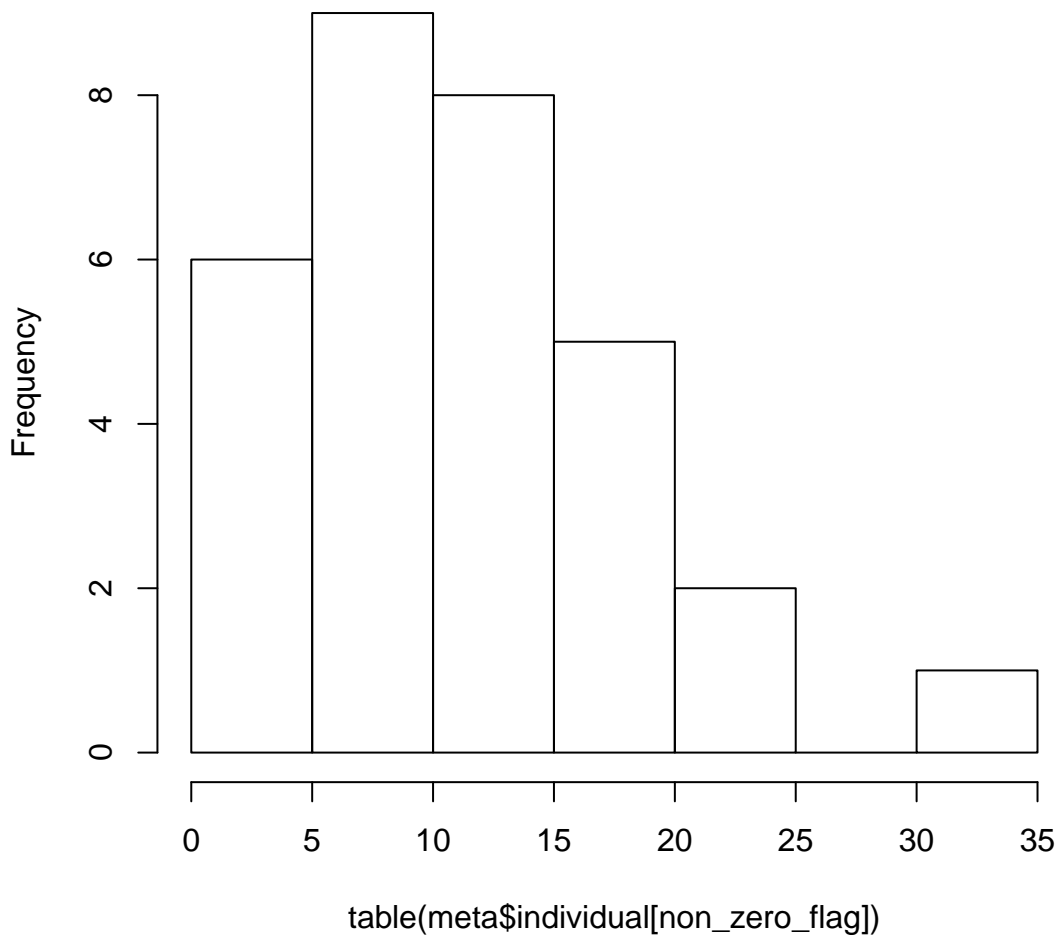
S nonsig: log expression of gene#1, pval ob=0.3891, non-zero num



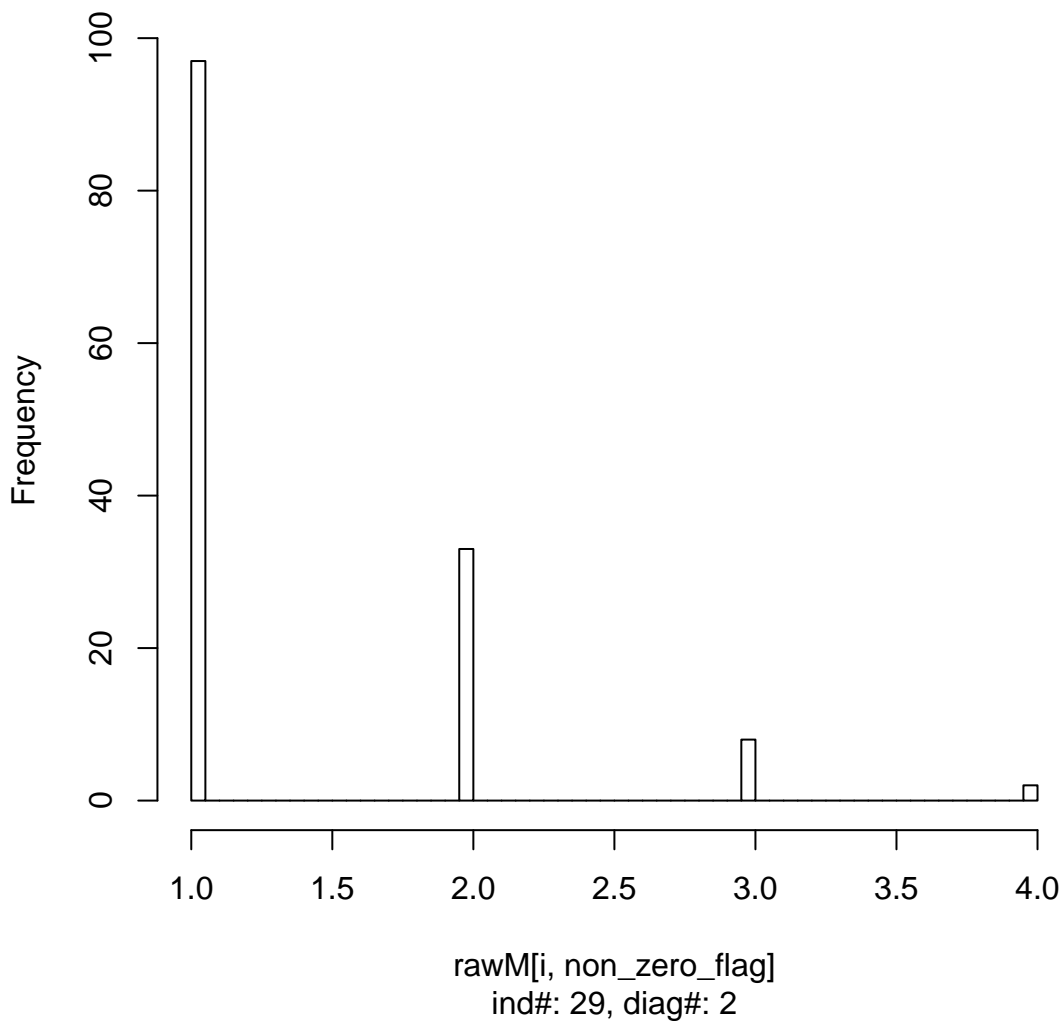
rawM[i, non_zero_flag]

ind#: 31, diag#: 2

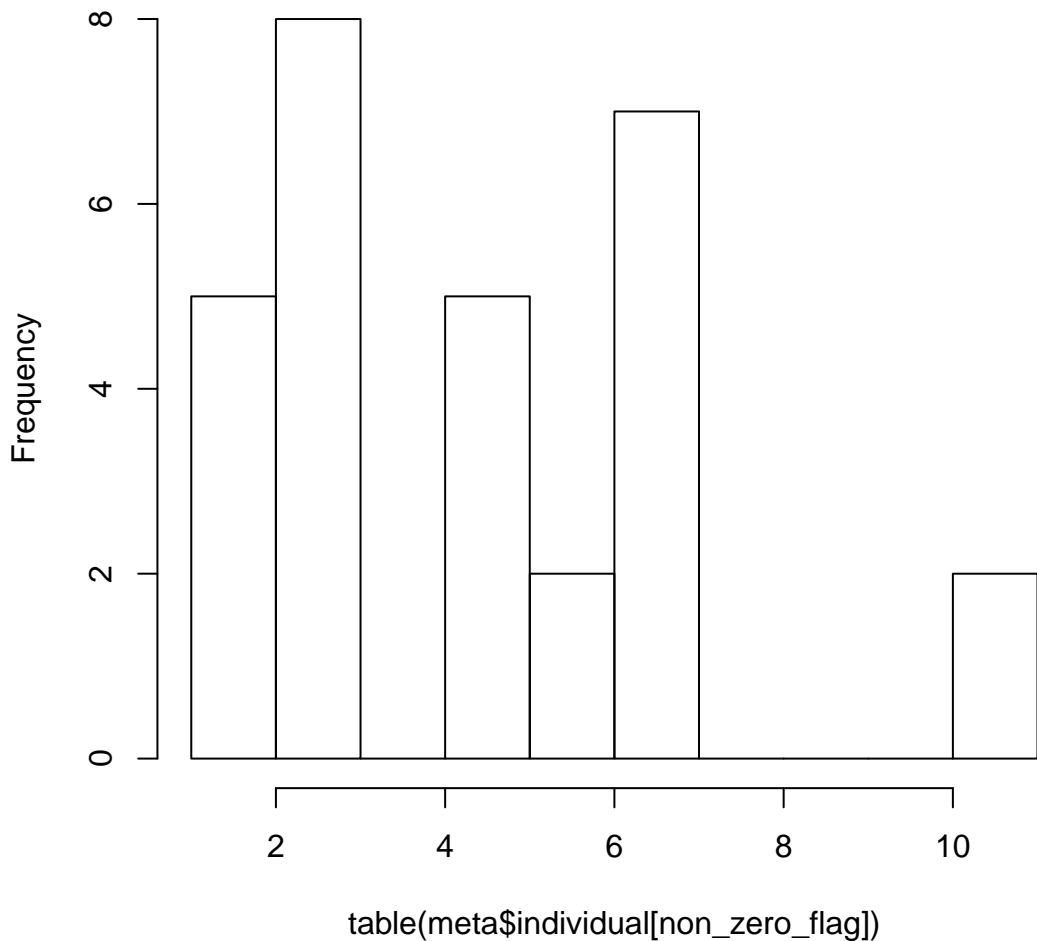
KSless nonsig: individual expression cell count of gene#1



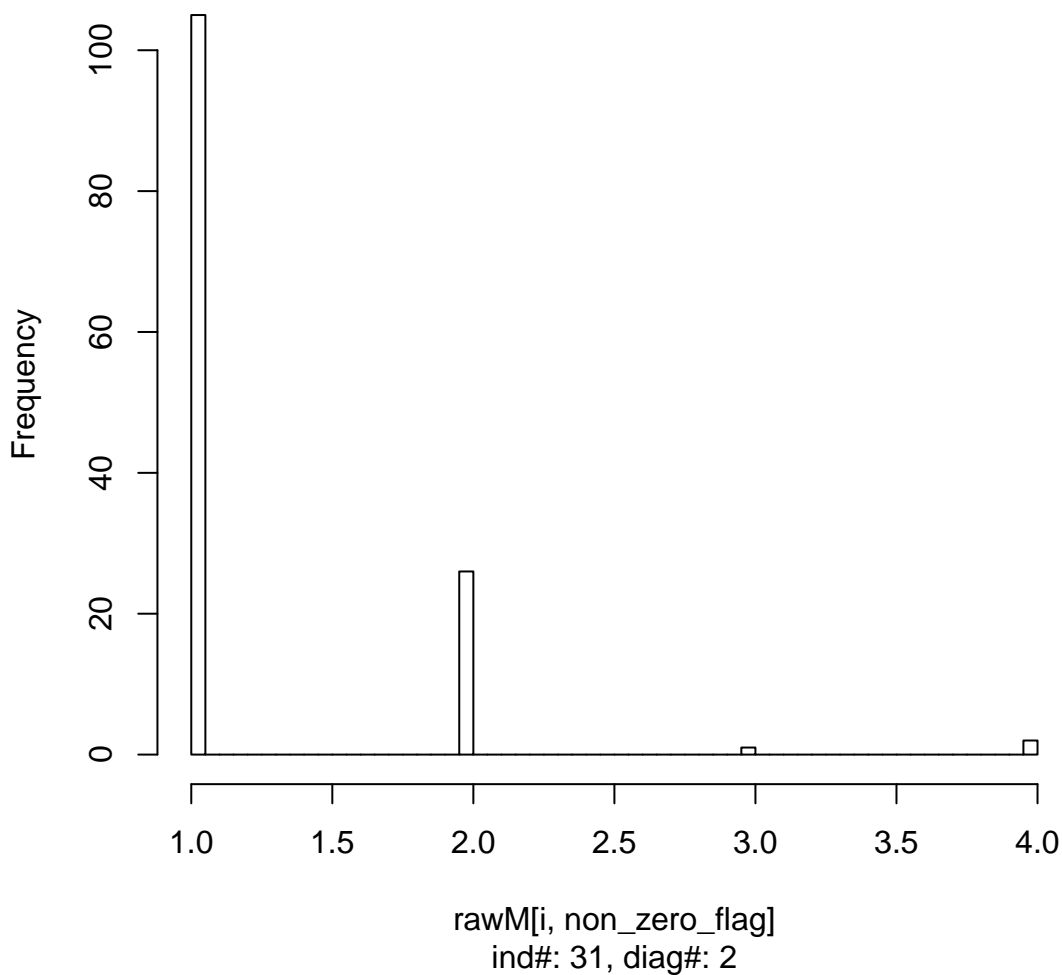
S nonsig: log expression of gene#2, pval ob=0.2846, non-zero num



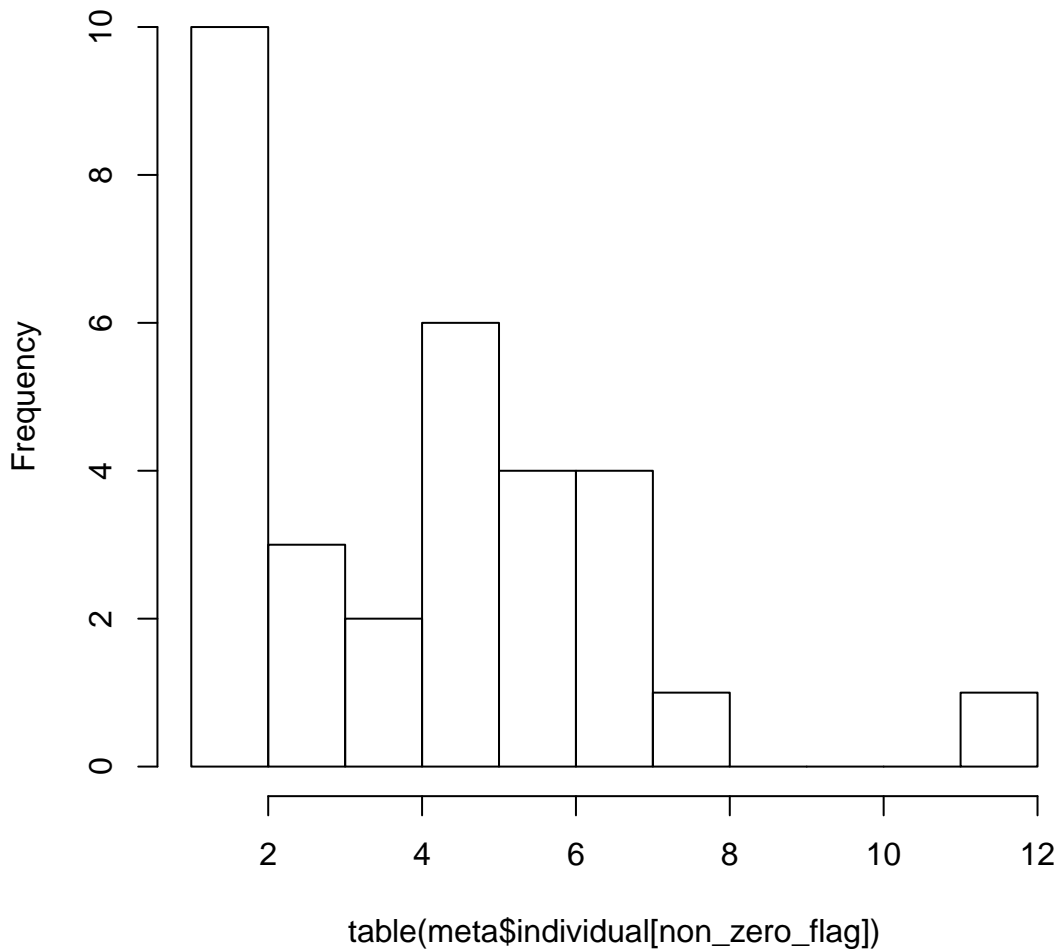
KSless nonsig: individual expression cell count of gene#2



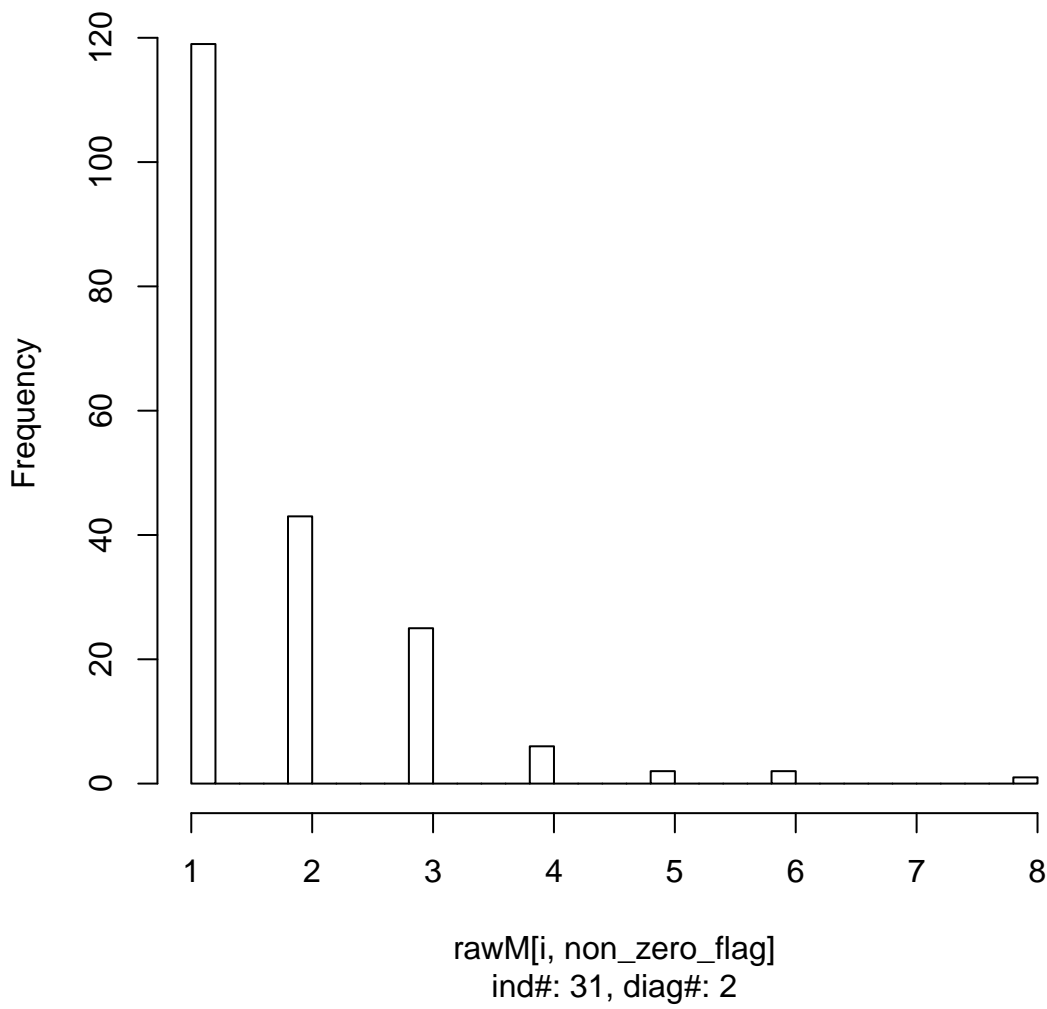
S nonsig: log expression of gene#3, pval ob=0.3326, non-zero num



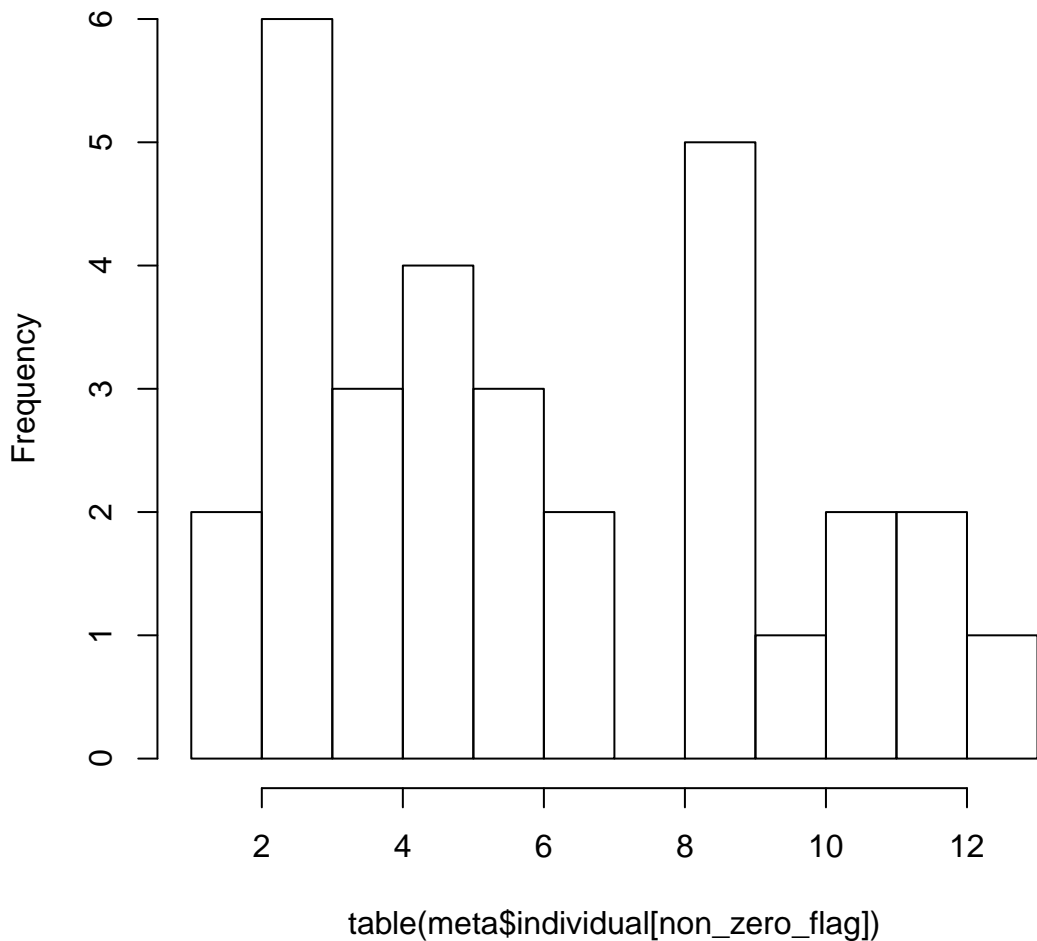
KSless nonsig: individual expression cell count of gene#3



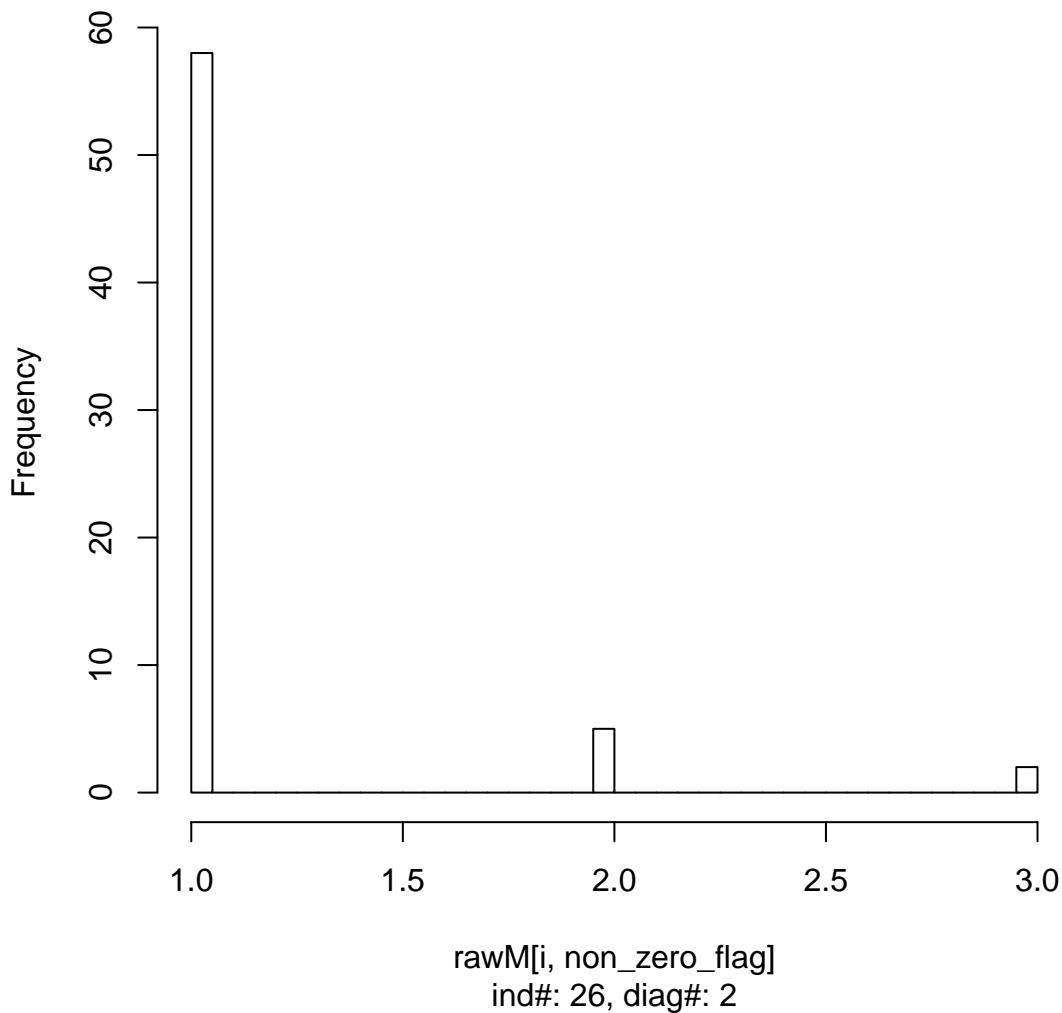
S nonsig: log expression of gene#4, pval ob=0.3607, non-zero num



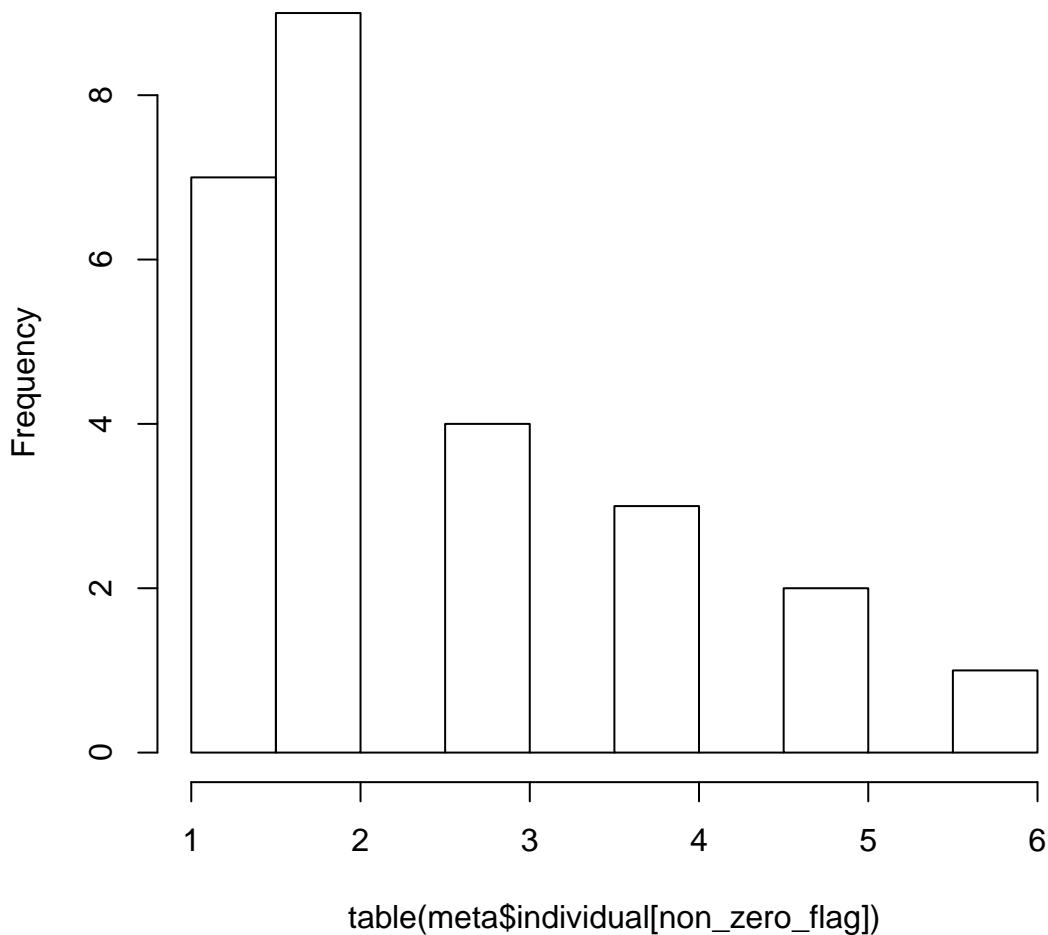
KSless nonsig: individual expression cell count of gene#4



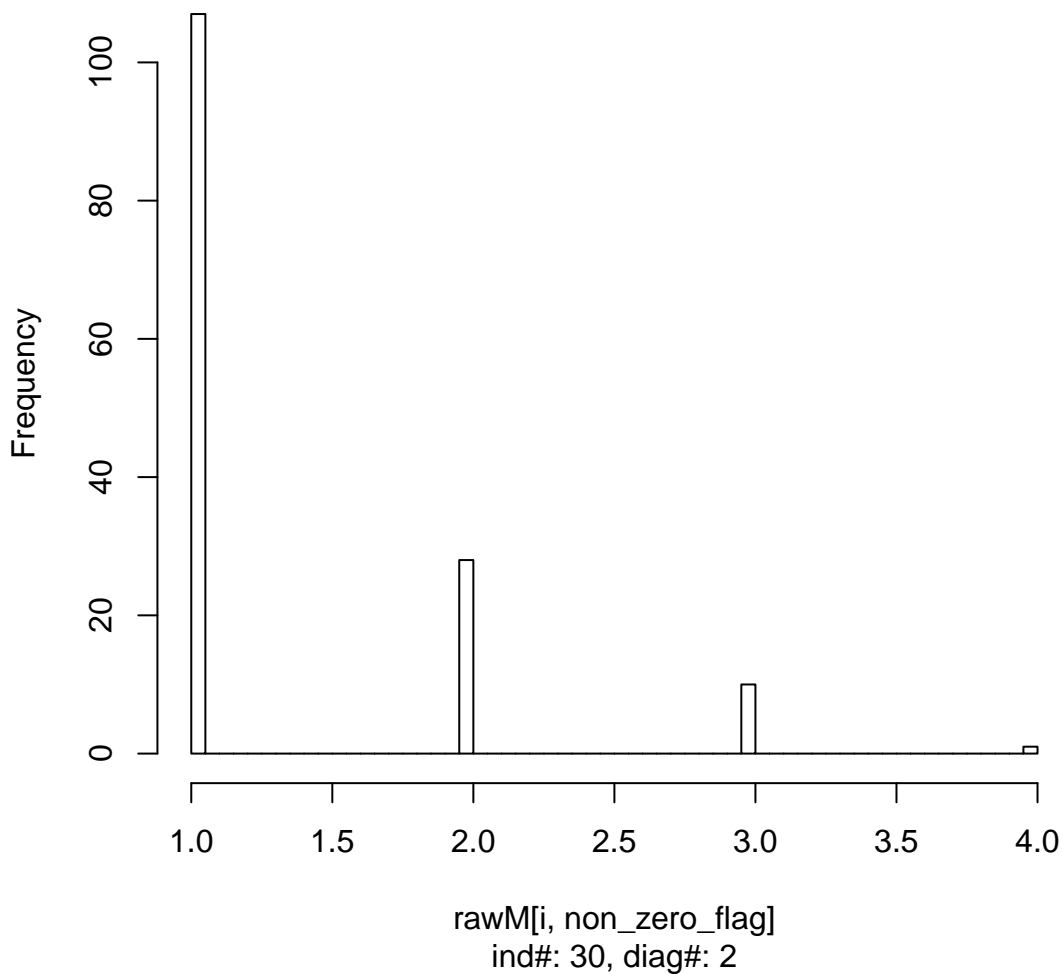
S nonsig: log expression of gene#5, pval ob=0.4555, non-zero nu



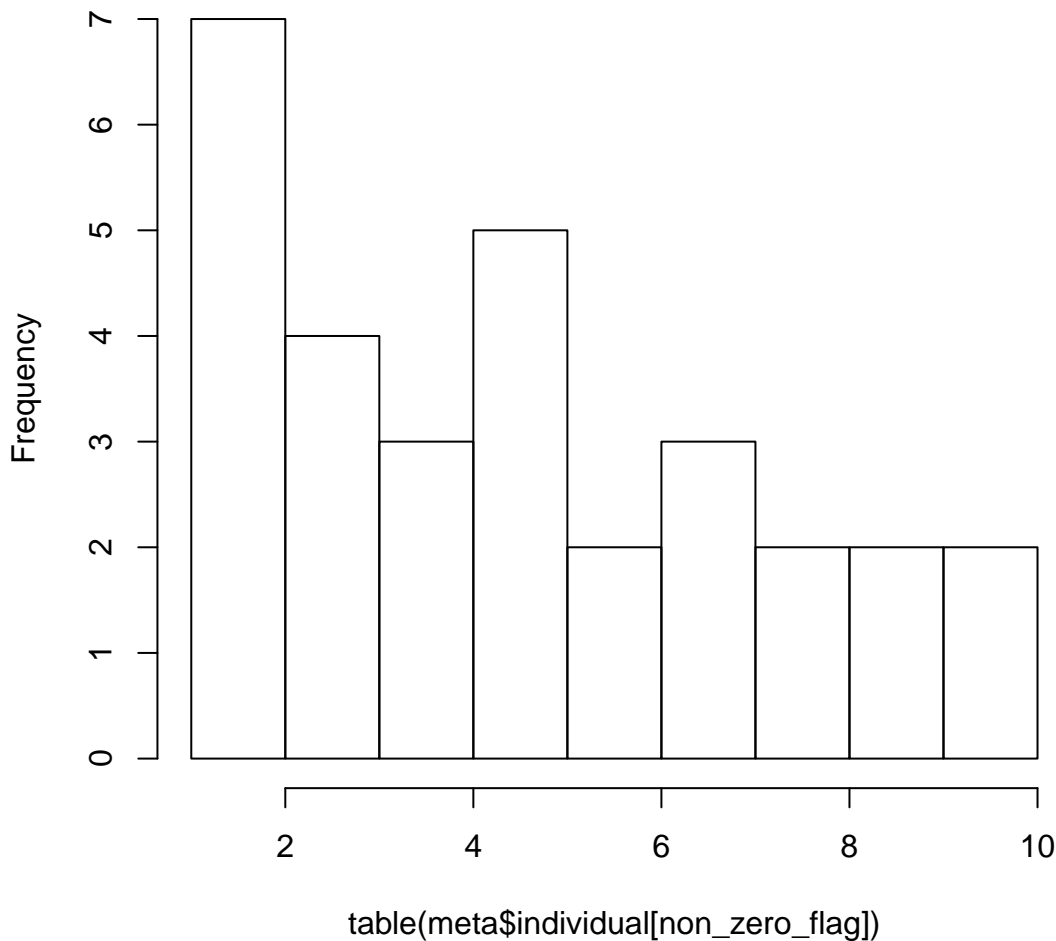
KSless nonsig: individual expression cell count of gene#5



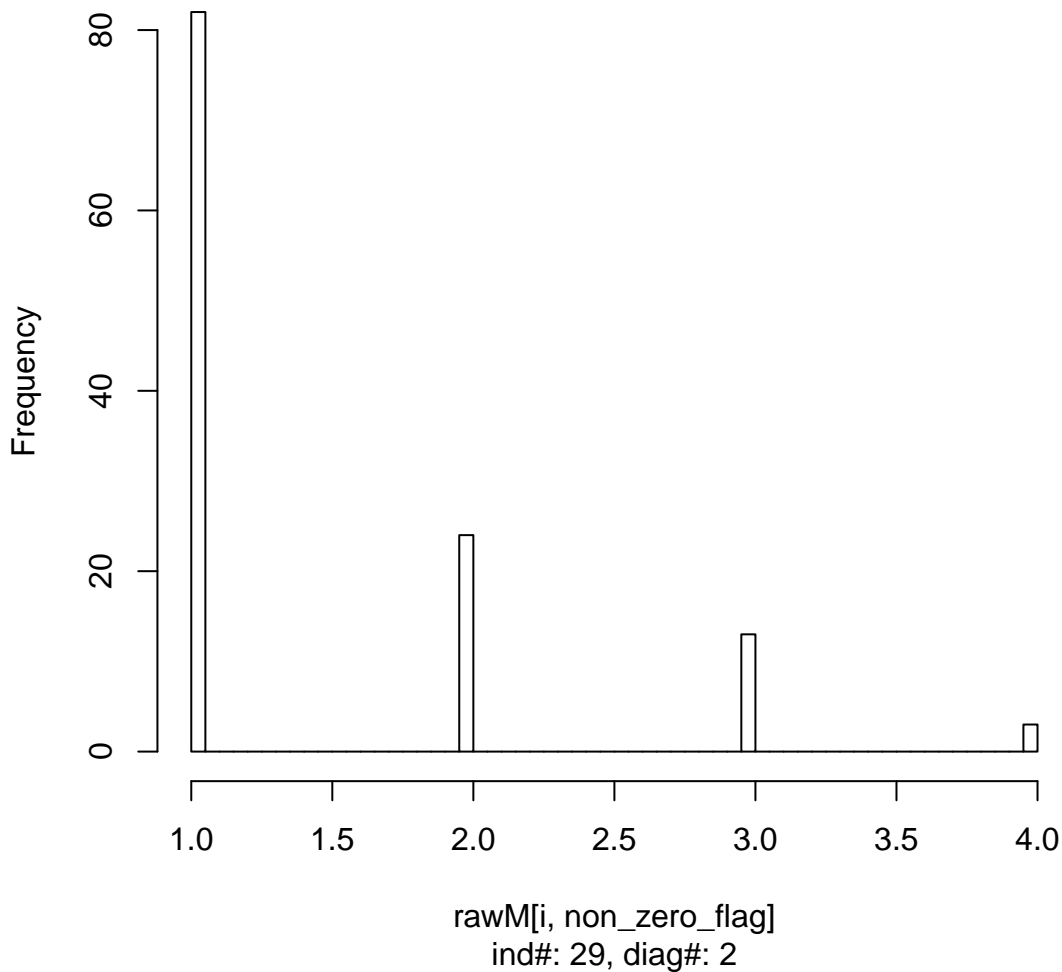
S nonsig: log expression of gene#6, pval ob=0.8226, non-zero nu



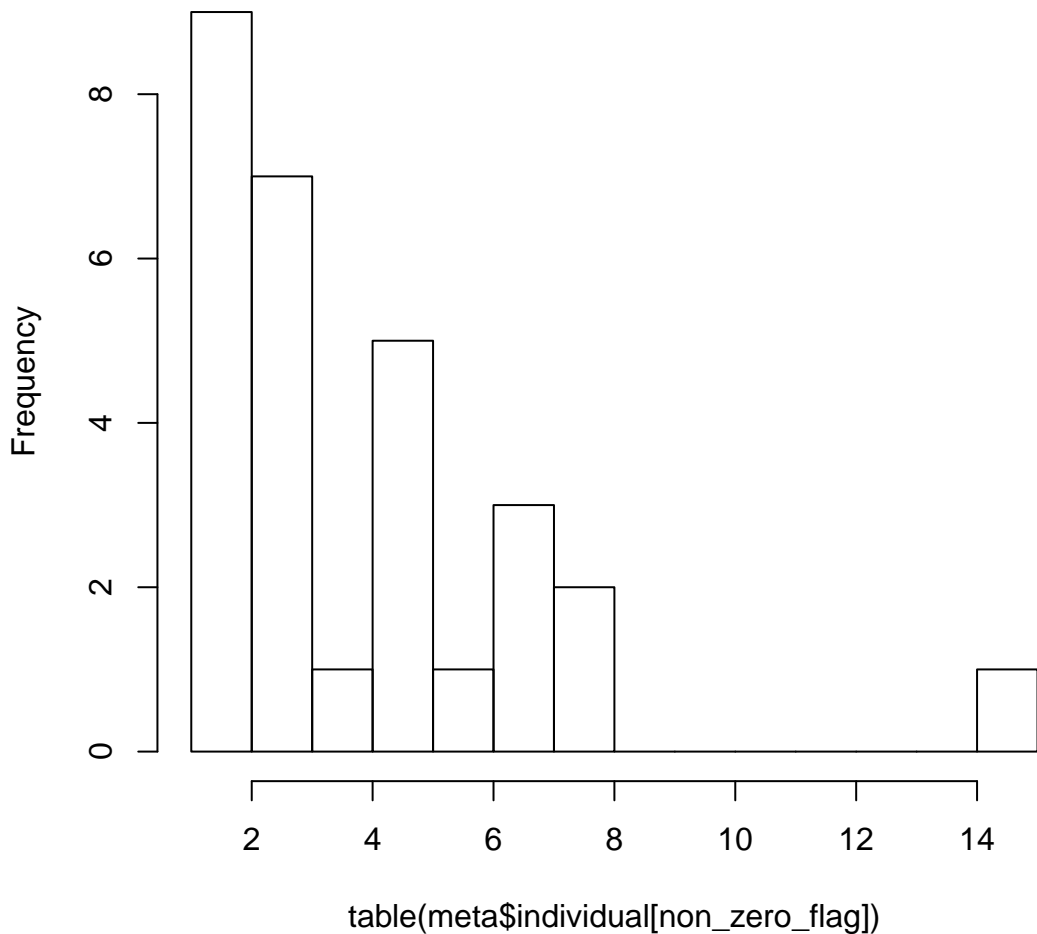
KSless nonsig: individual expression cell count of gene#6



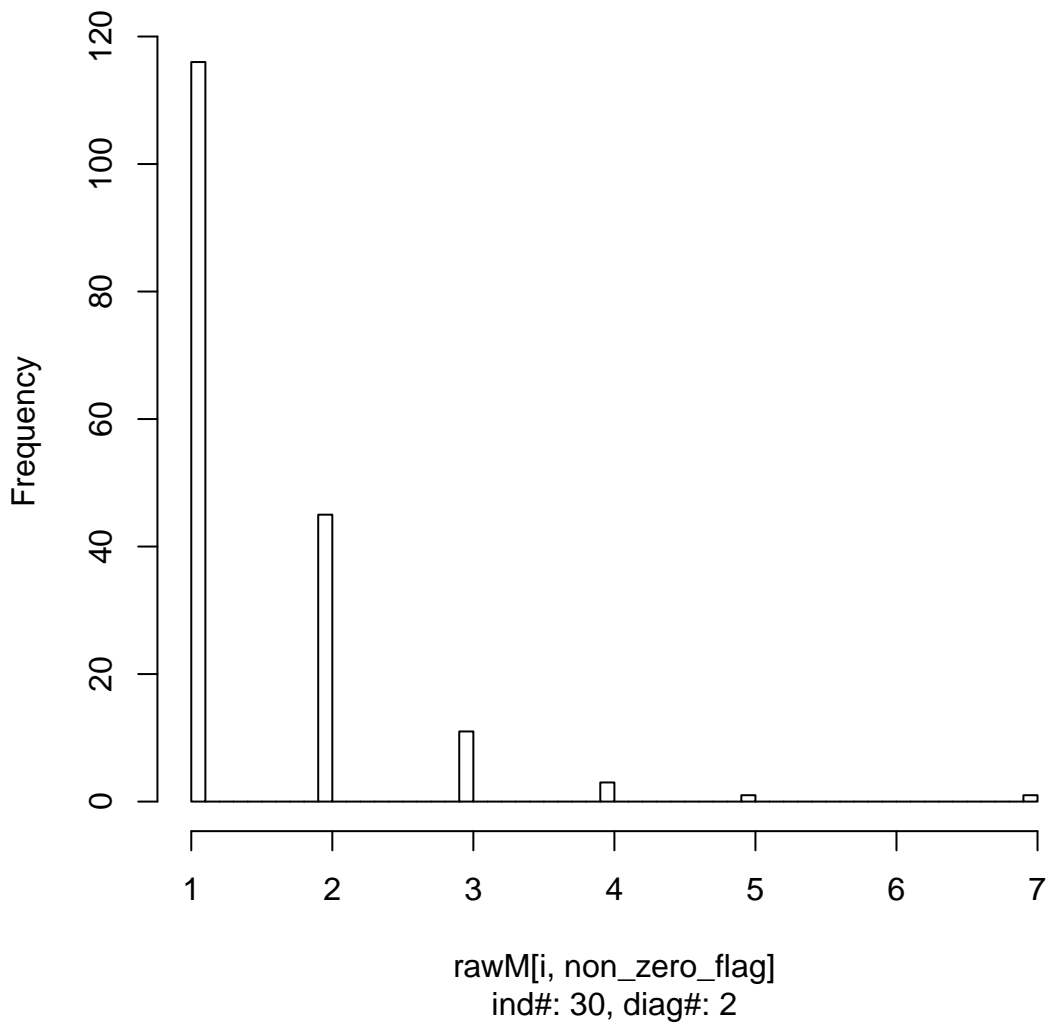
S nonsig: log expression of gene#9, pval ob=0.7589, non-zero nu



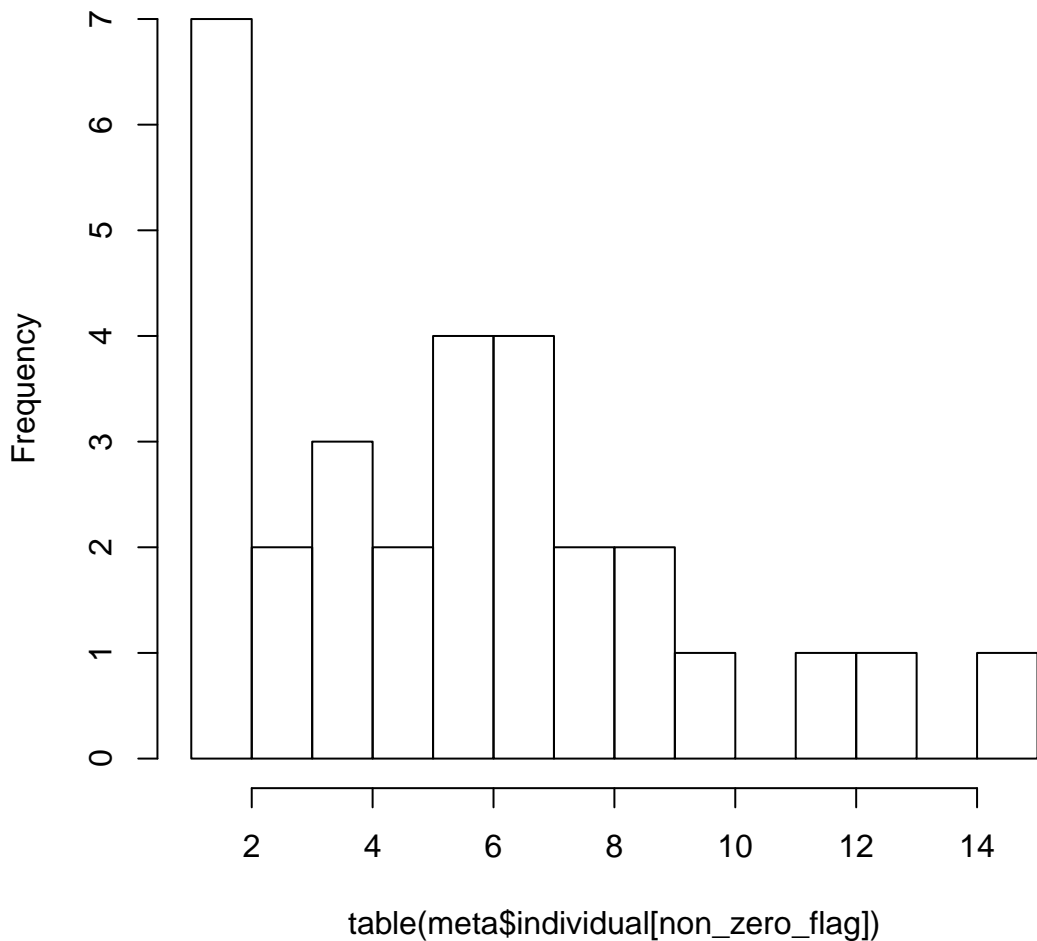
KSless nonsig: individual expression cell count of gene#9



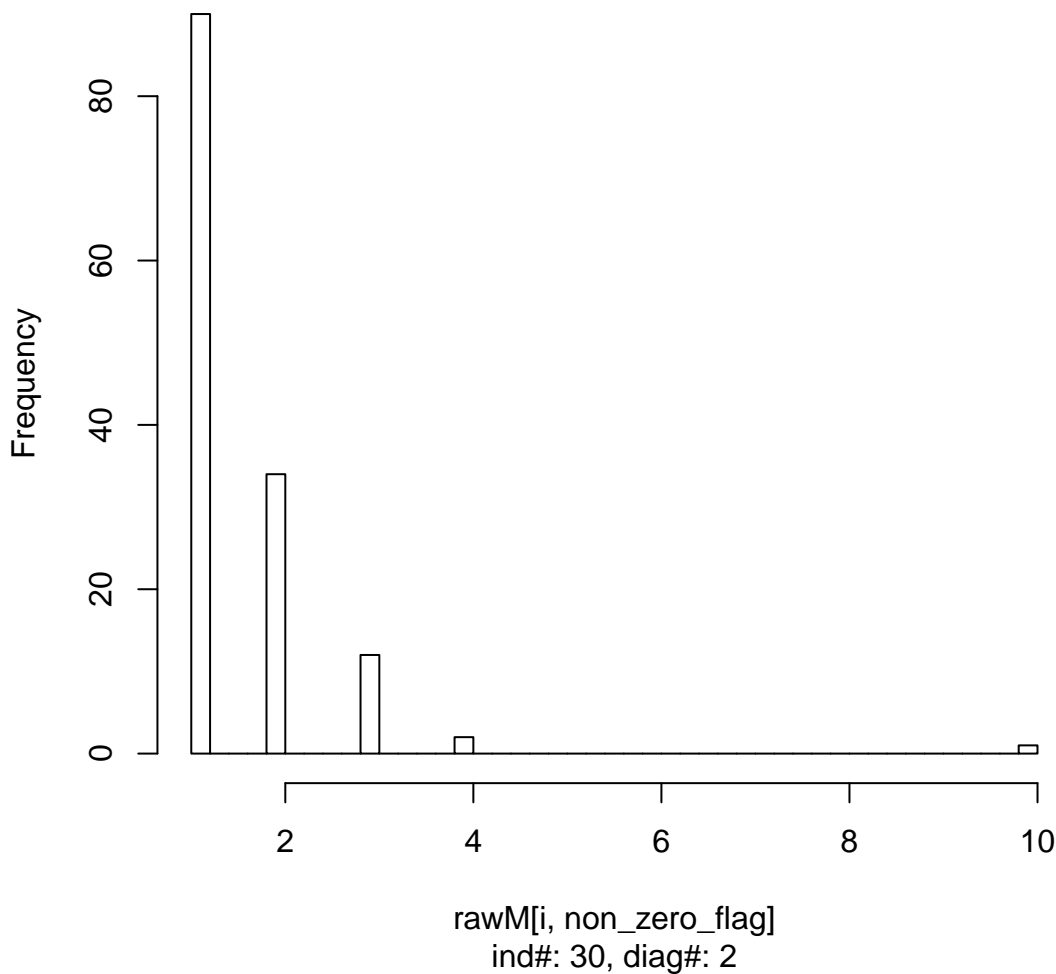
nsig: log expression of gene#10, pval ob=0.6479, non-zero nu



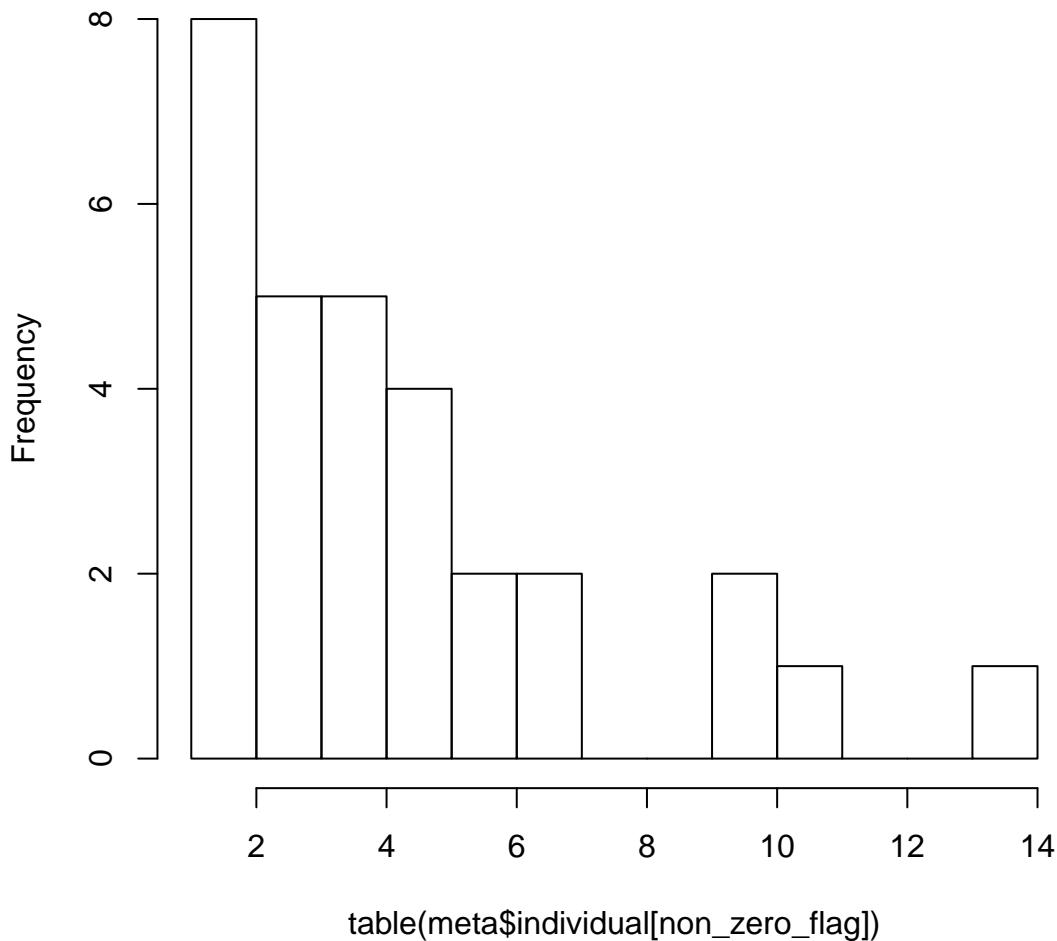
KSless nonsig: individual expression cell count of gene#10



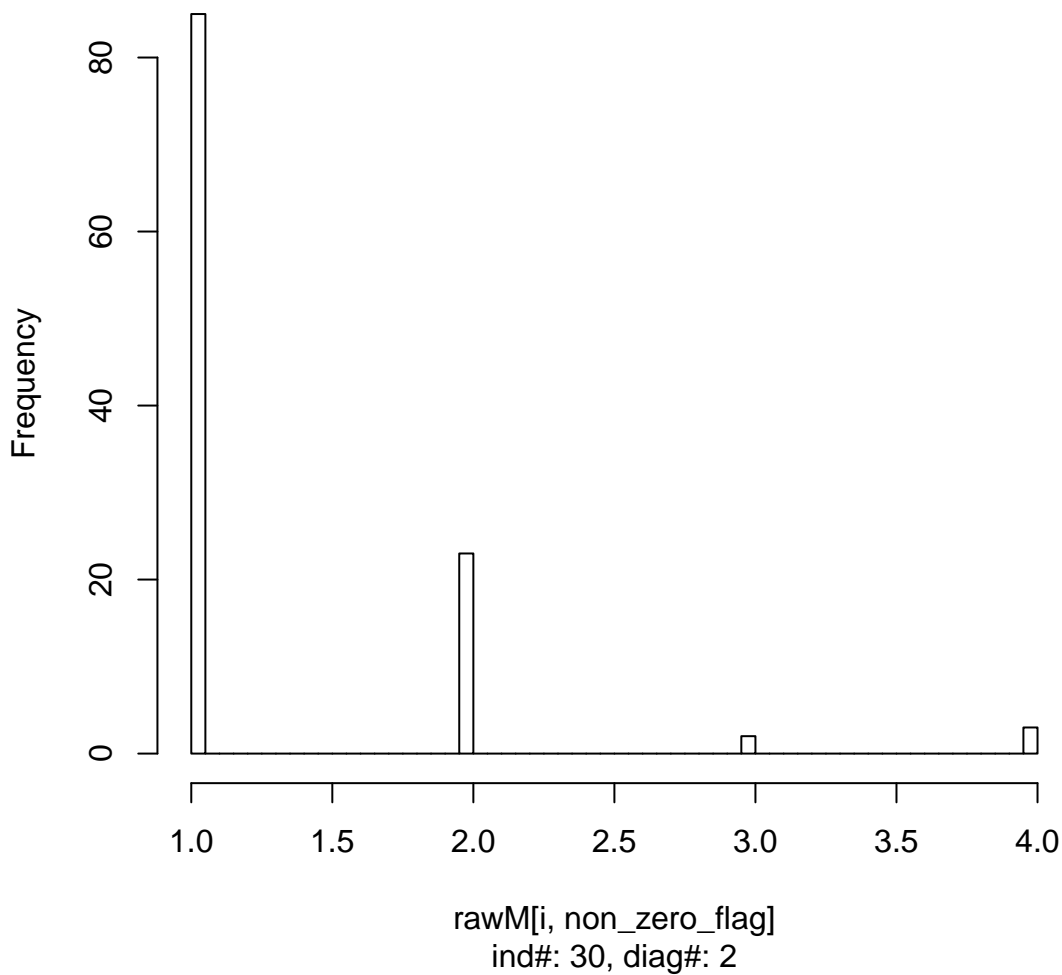
nonsig: log expression of gene#12, pval ob=0.4276, non-zero nu



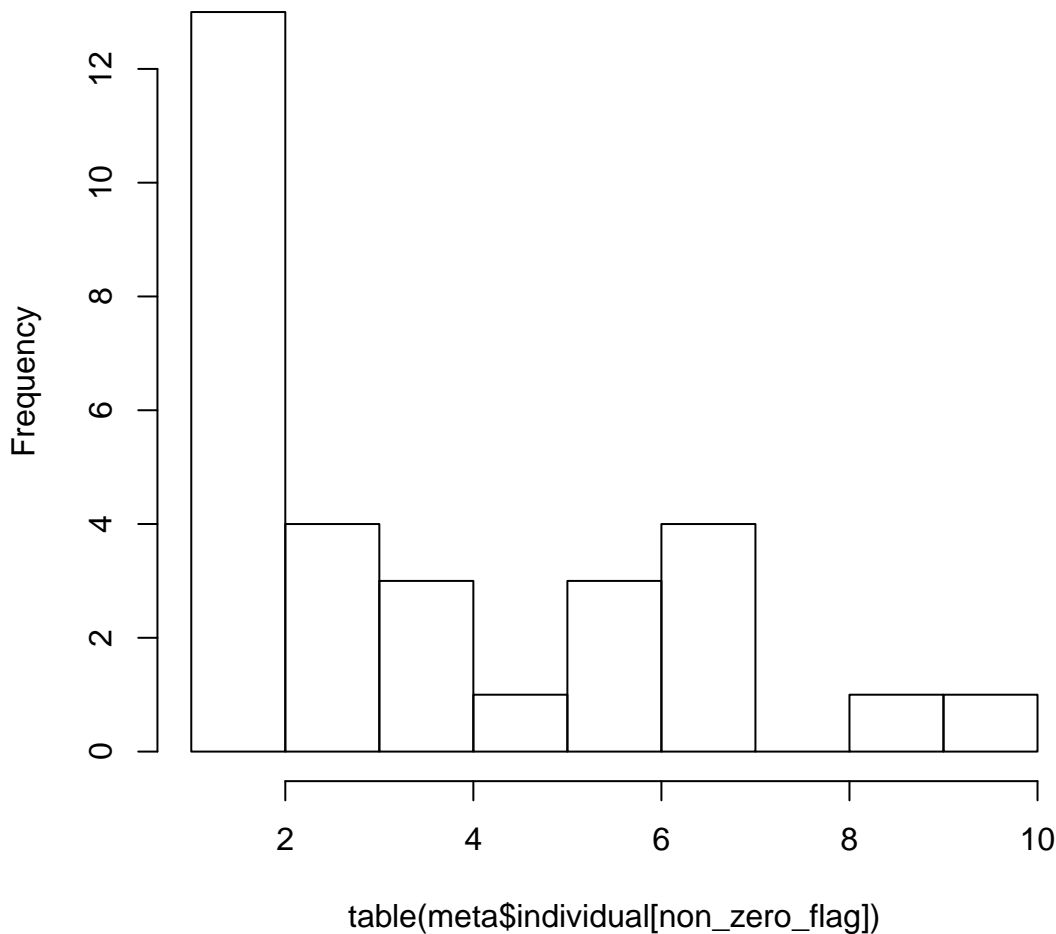
KSless nonsig: individual expression cell count of gene#12



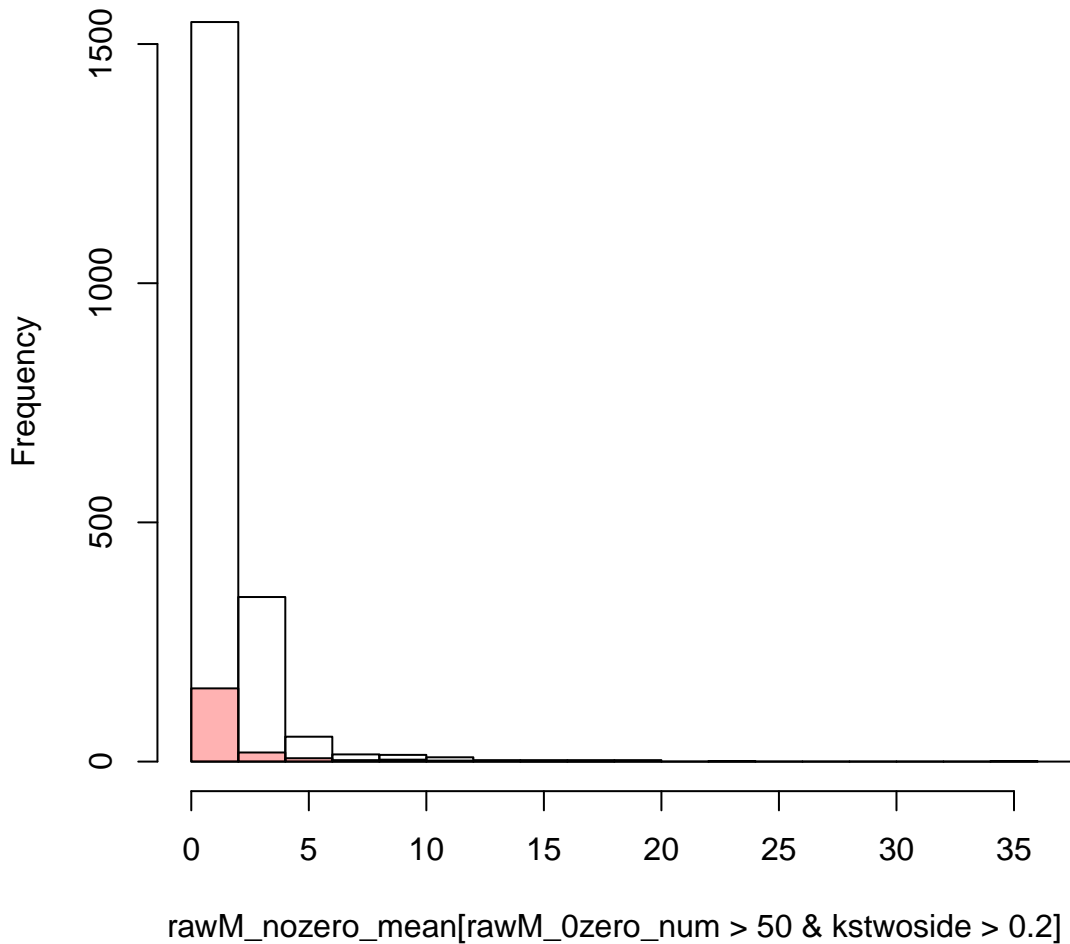
nsig: log expression of gene#14, pval ob=0.2944, non-zero nu



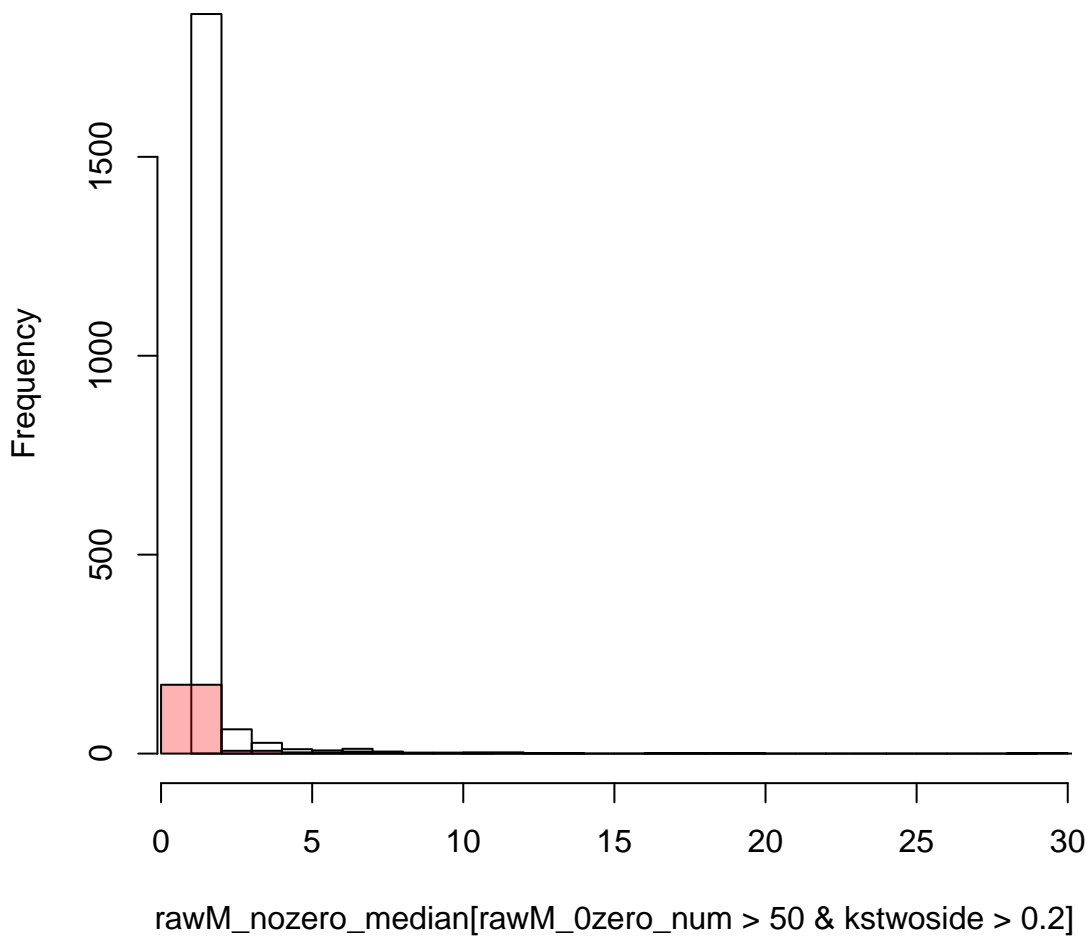
KSless nonsig: individual expression cell count of gene#14



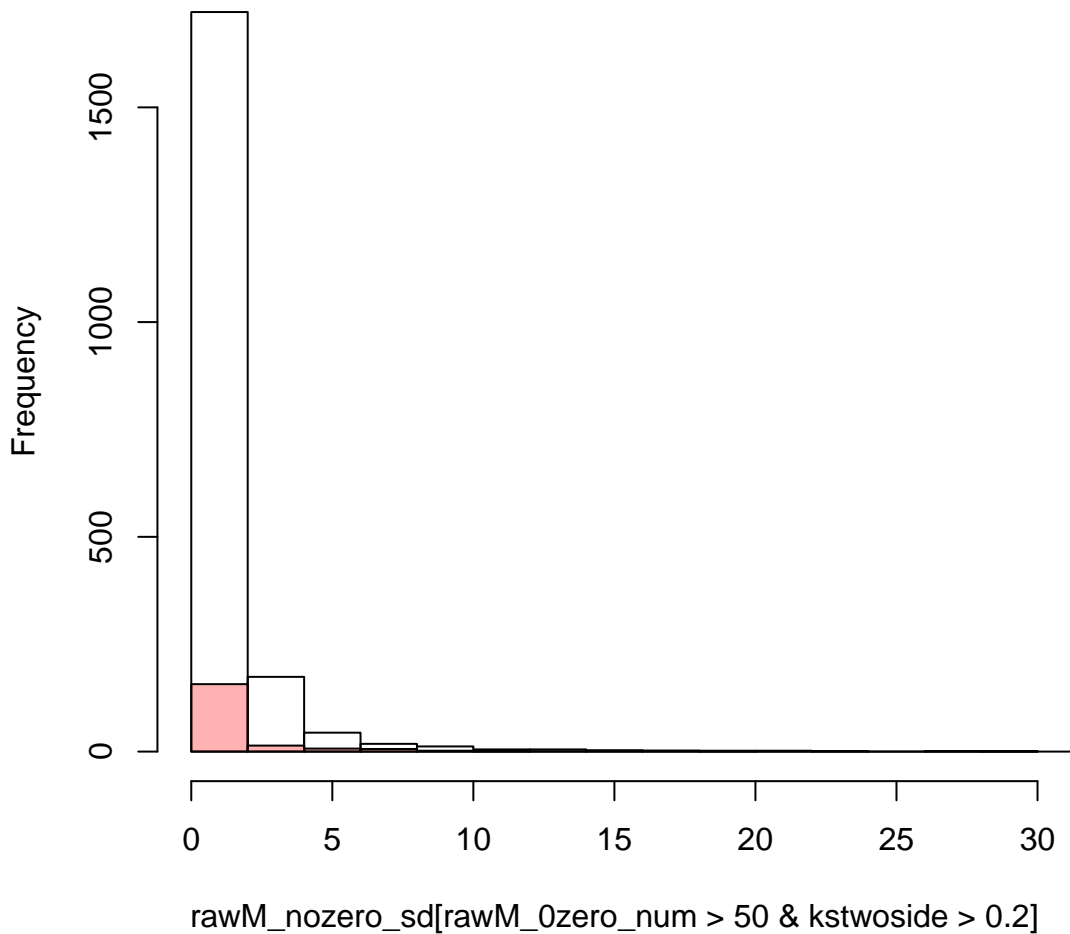
Histogram of rawM_nozero_mean[rawM_0zero_num > 50 & kstwsid



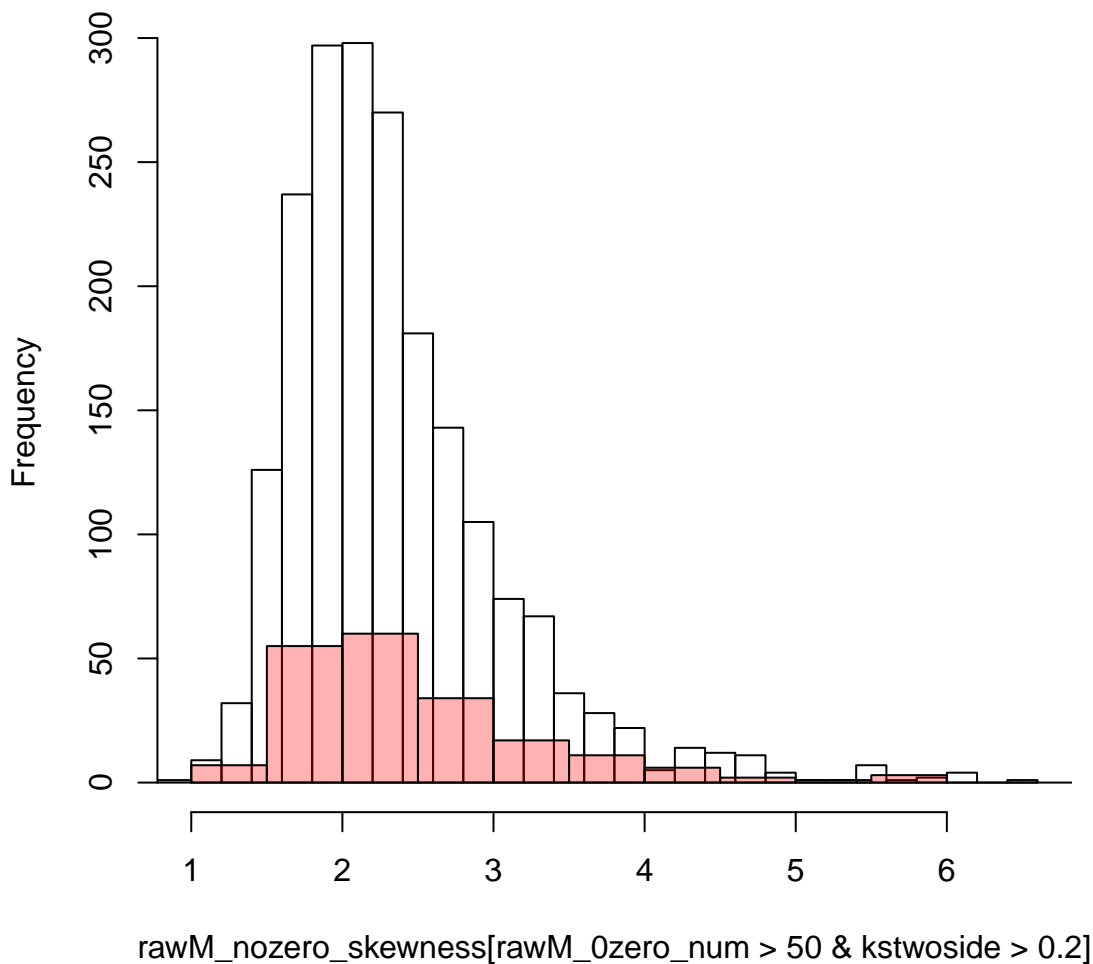
ogram of rawM_nozero_median[rawM_0zero_num > 50 & kstwosi



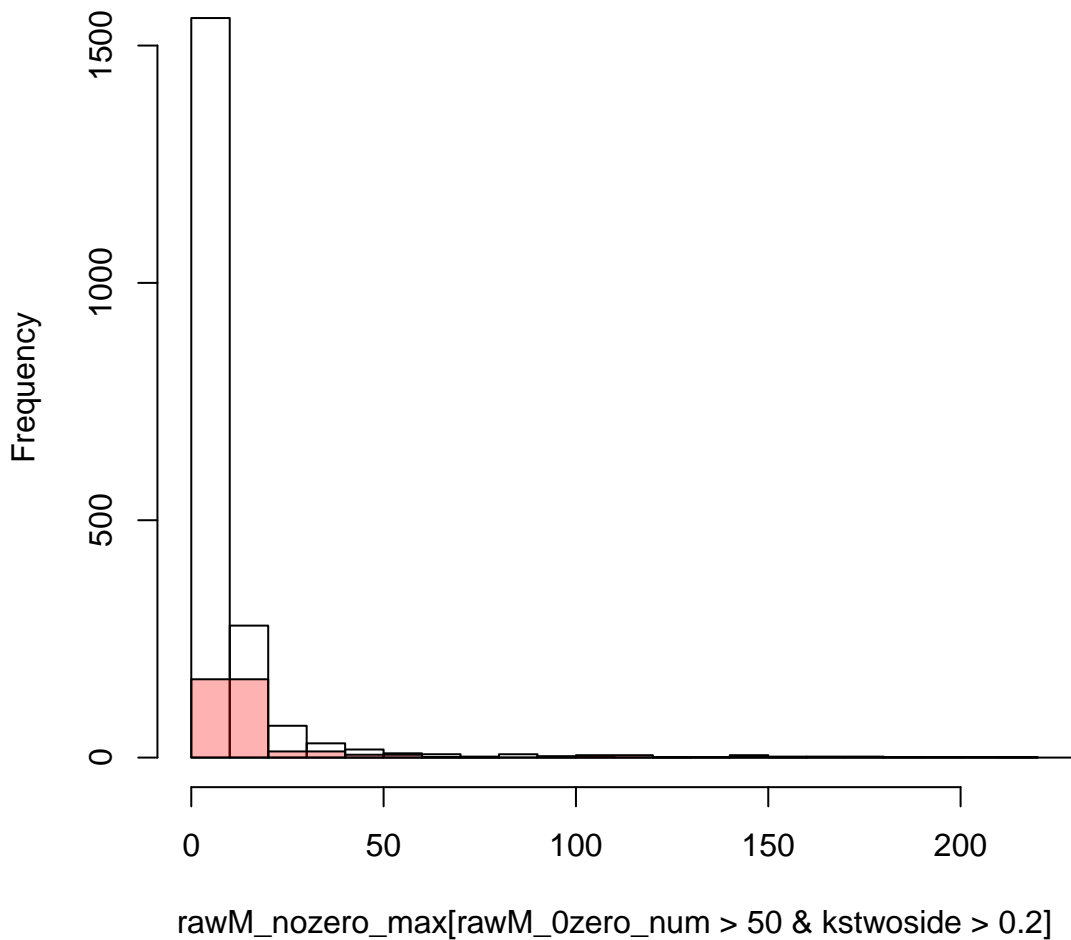
histogram of rawM_nozero_sd[rawM_0zero_num > 50 & kstwoside



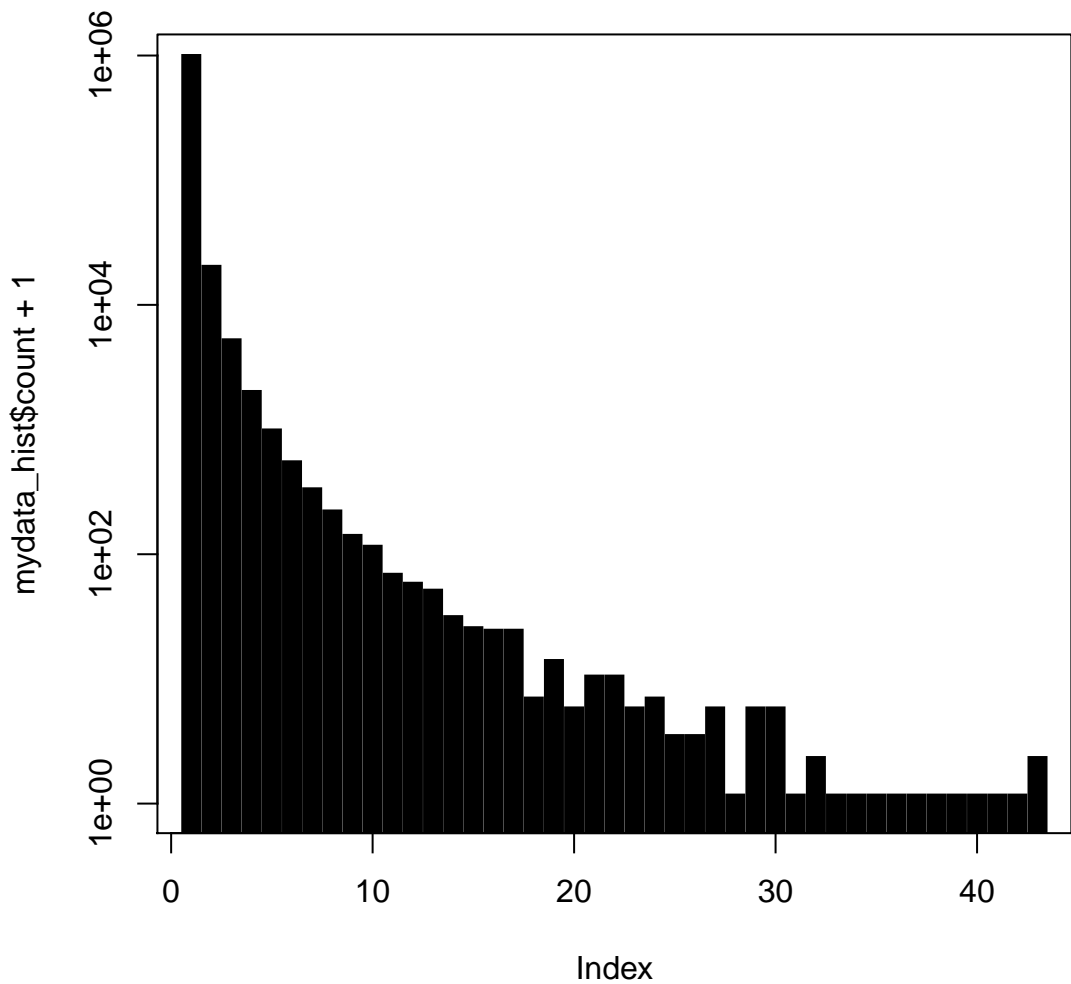
gram of rawM_nozero_skewness[rawM_0zero_num > 50 & kstws



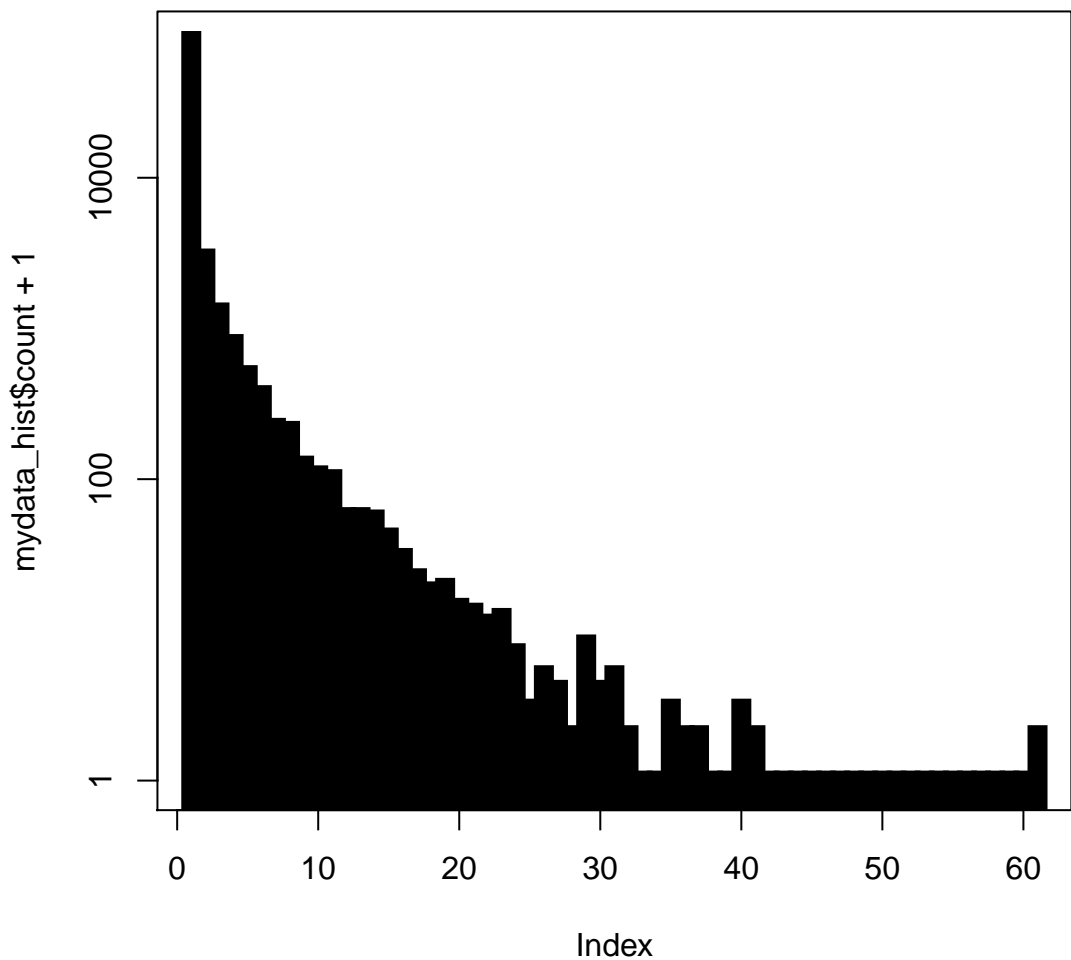
Histogram of rawM_nozero_max[rawM_0zero_num > 50 & kstwoside



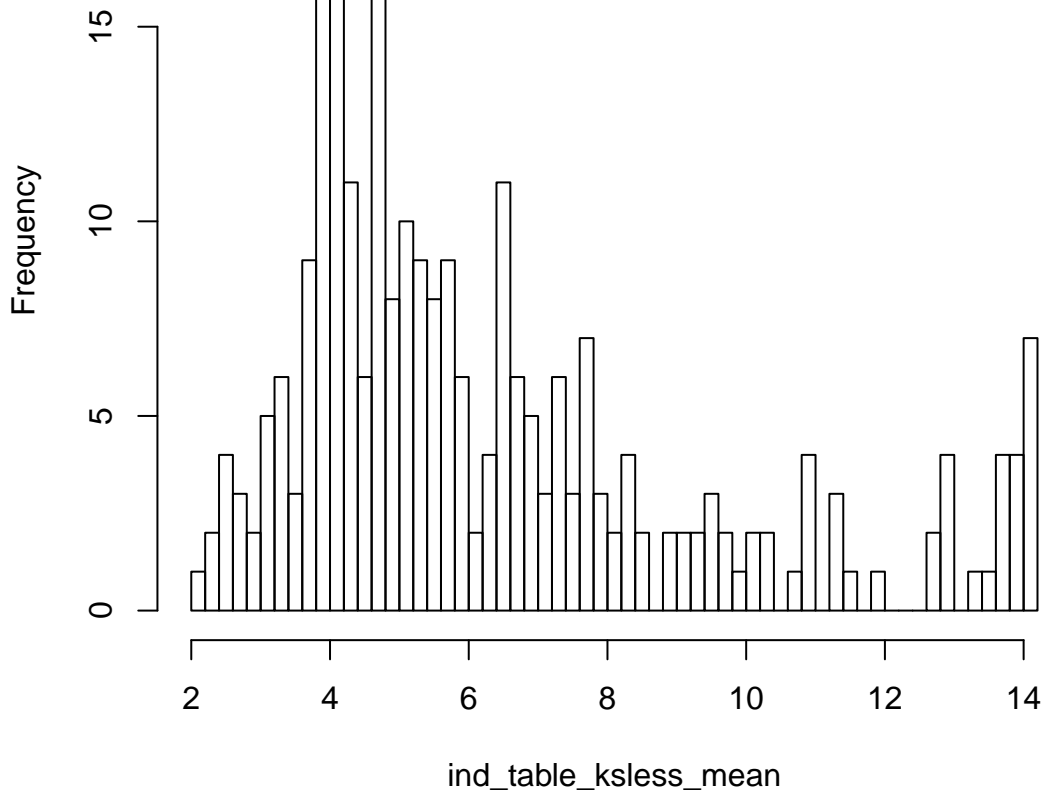
genes $\log(\text{expression} + 1)$ with least 50 cell expression and kstwosi



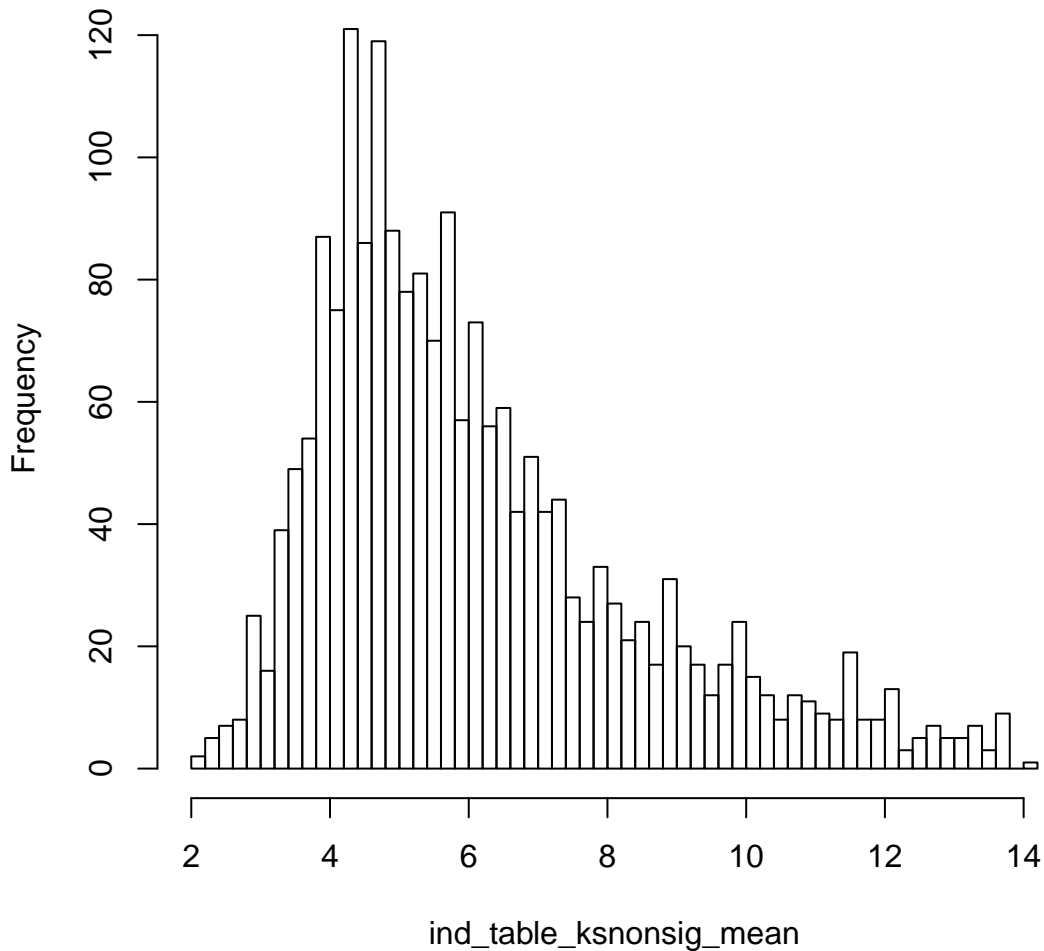
genes $\log(\text{expression} + 1)$ with least 50 cell expression and kstwo



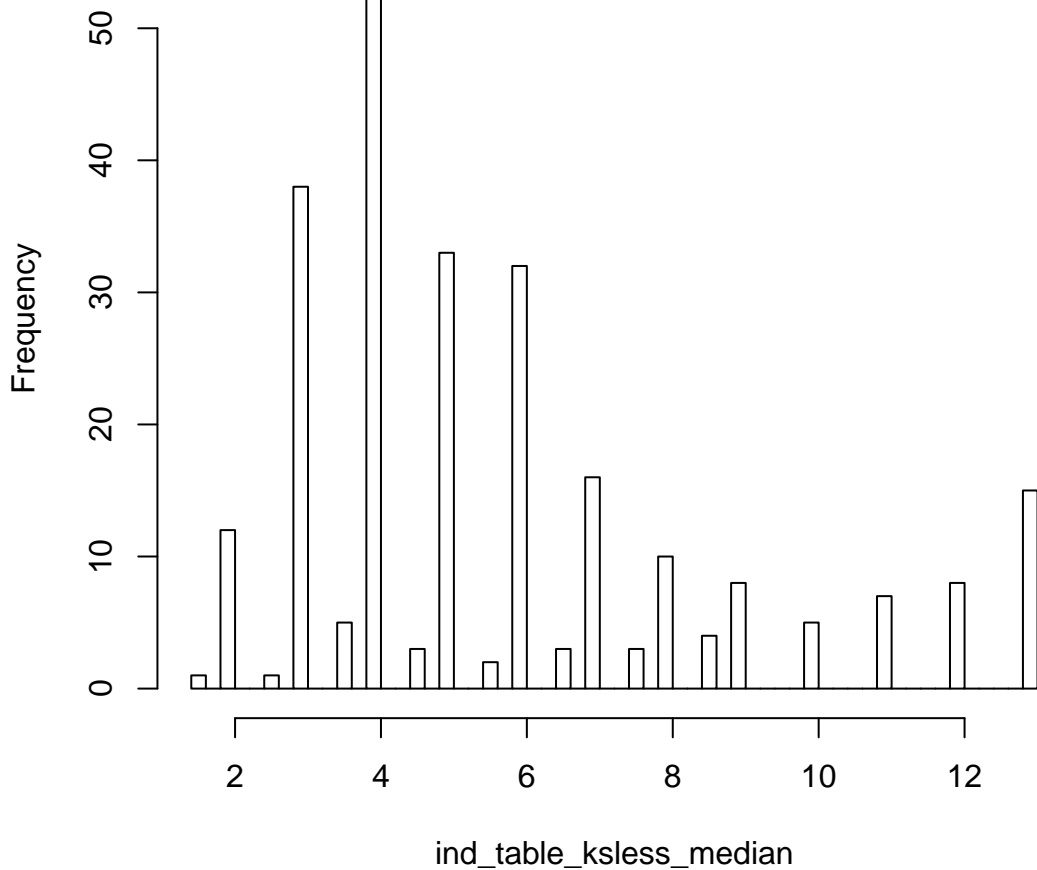
Histogram of ind_table_ksless_mean



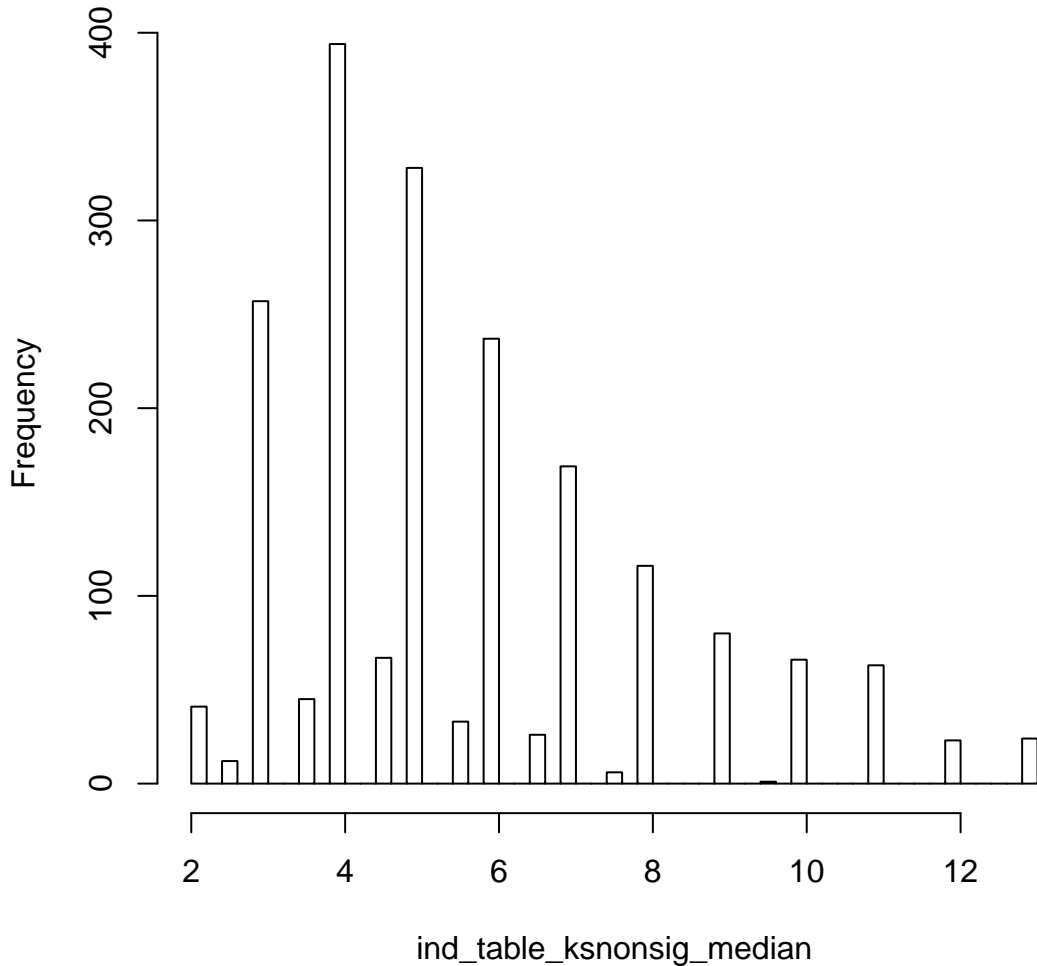
Histogram of ind_table_ksnonsig_mean



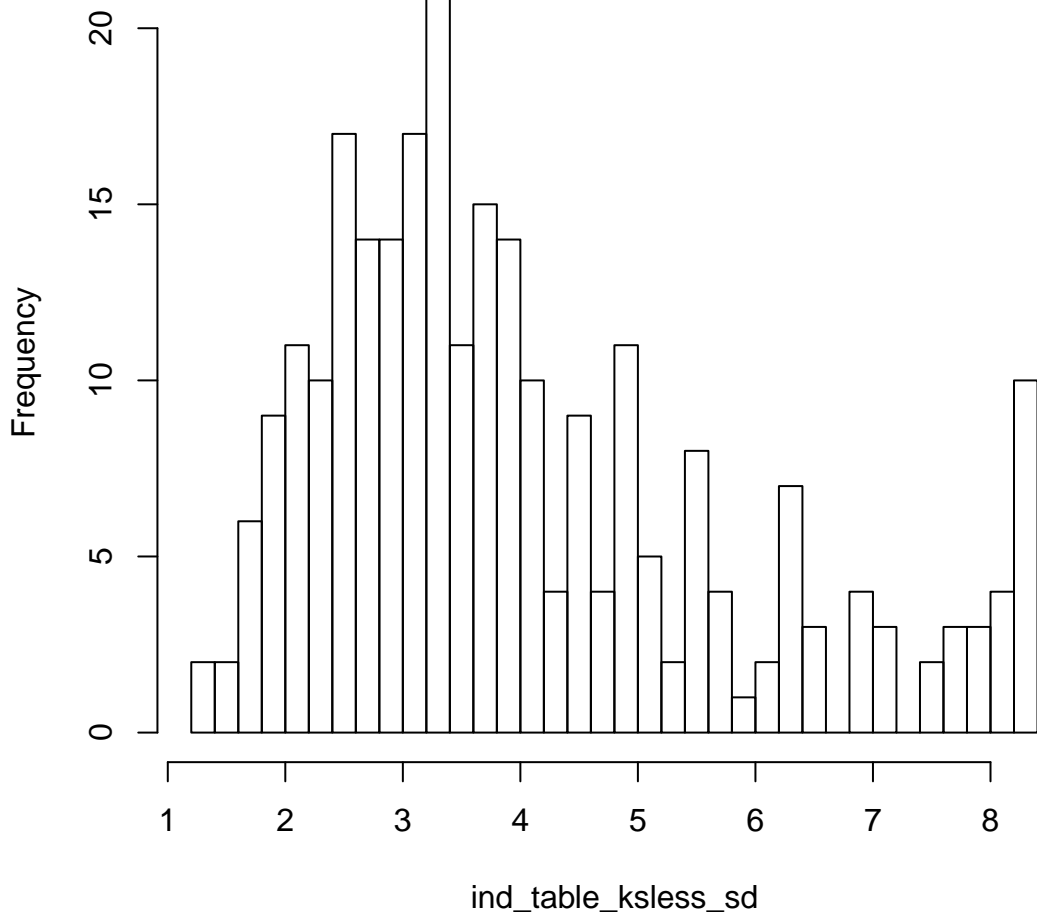
Histogram of ind_table_ksless_median



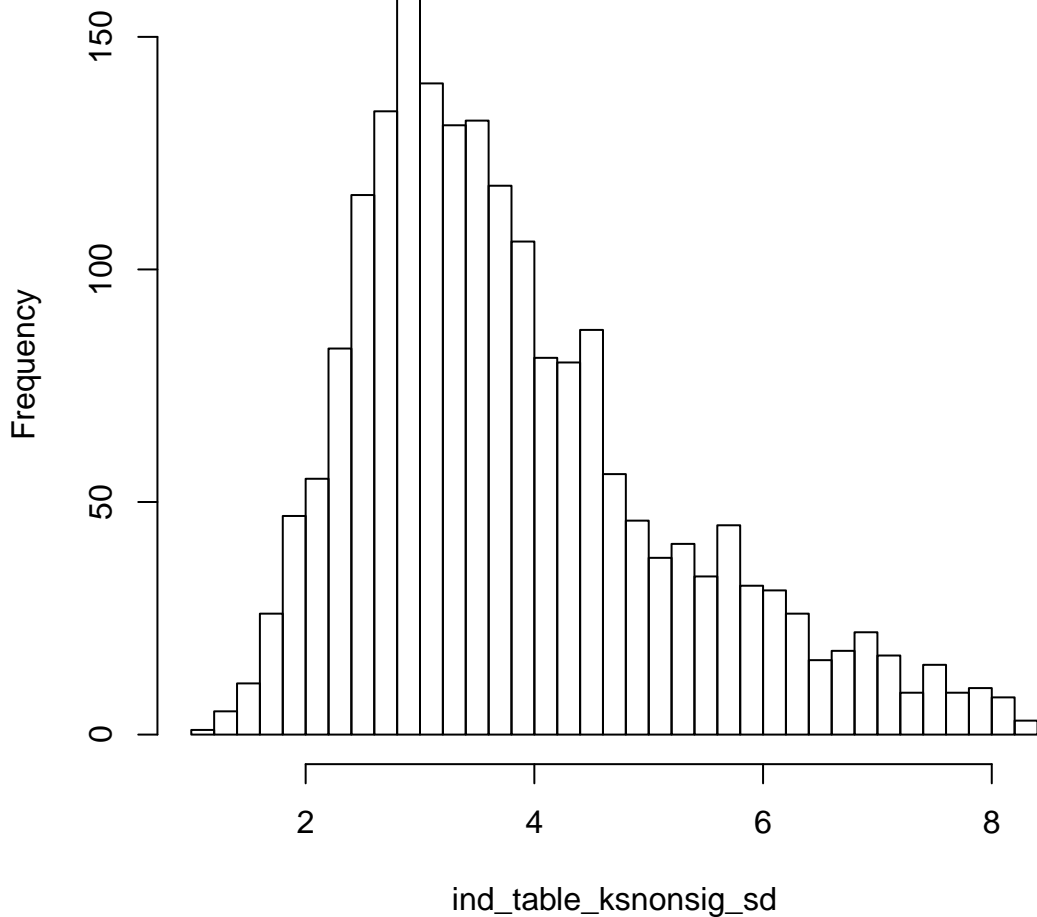
Histogram of ind_table_ksnonsig_median



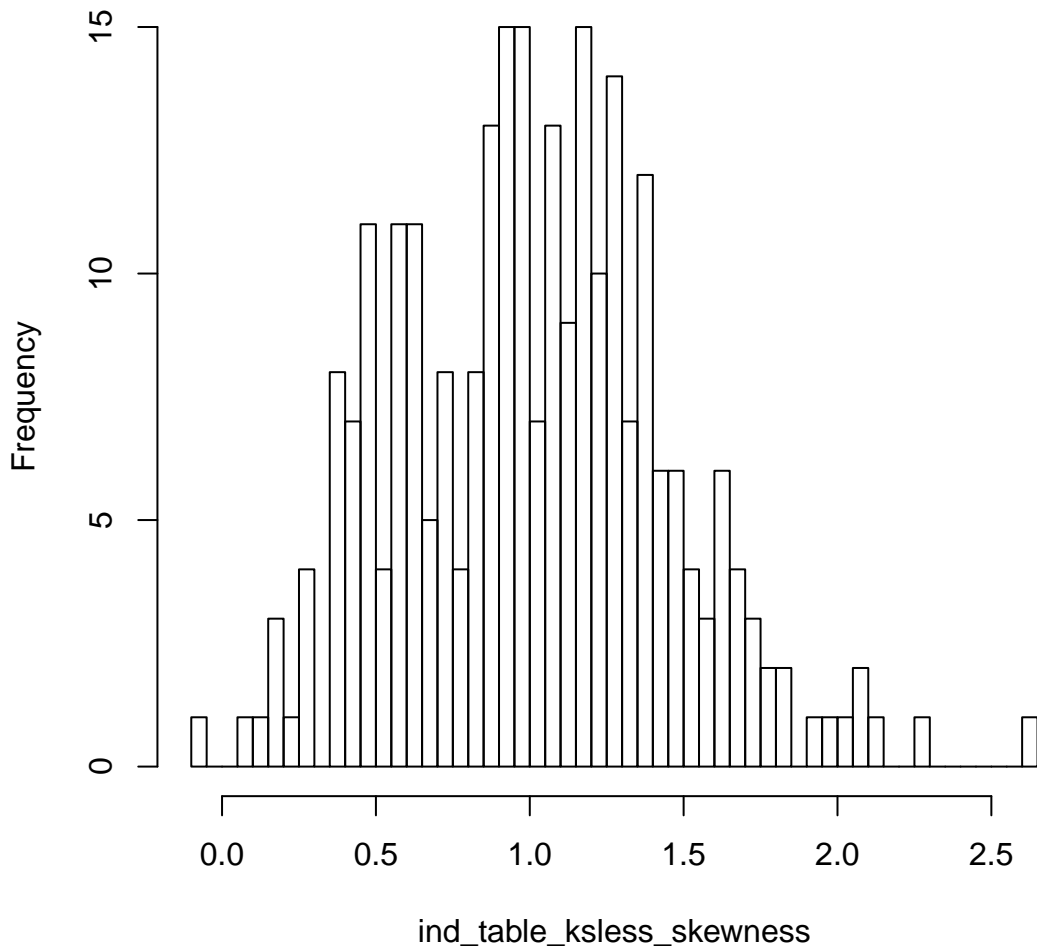
Histogram of ind_table_ksless_sd



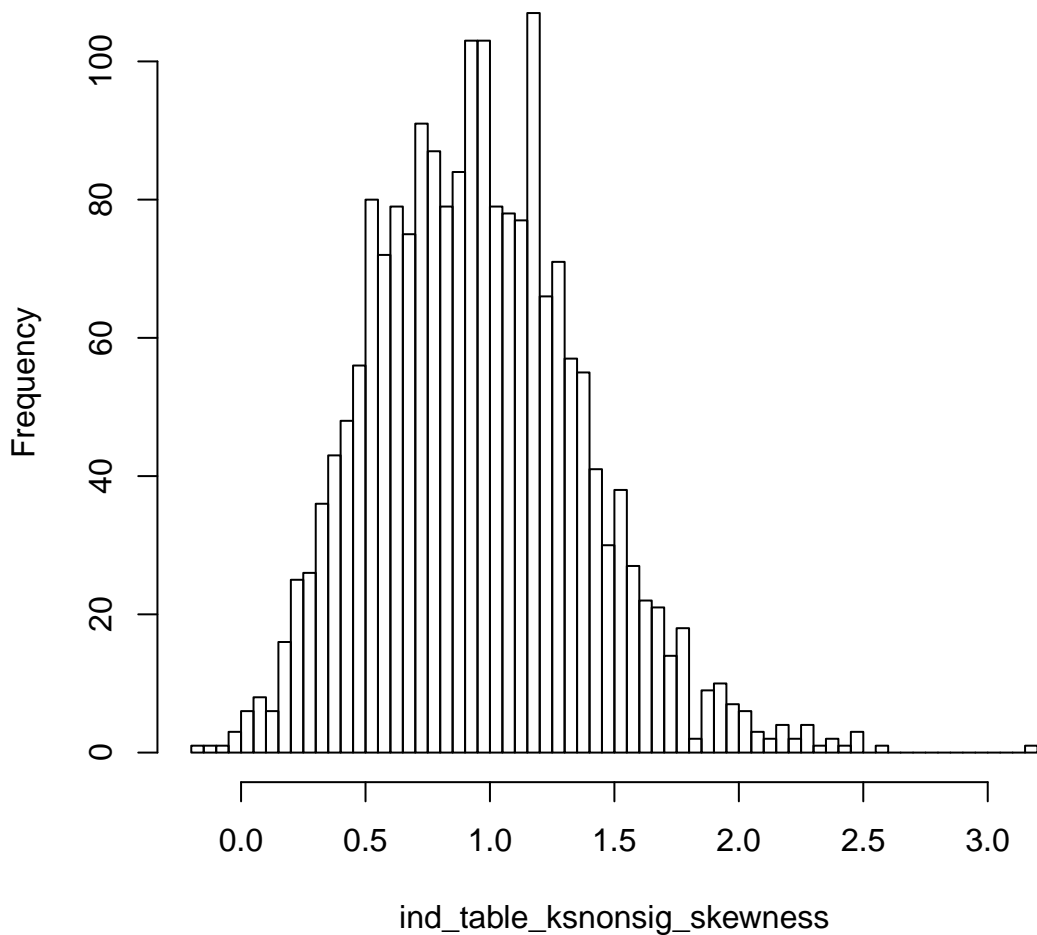
Histogram of ind_table_ksnonsig_sd



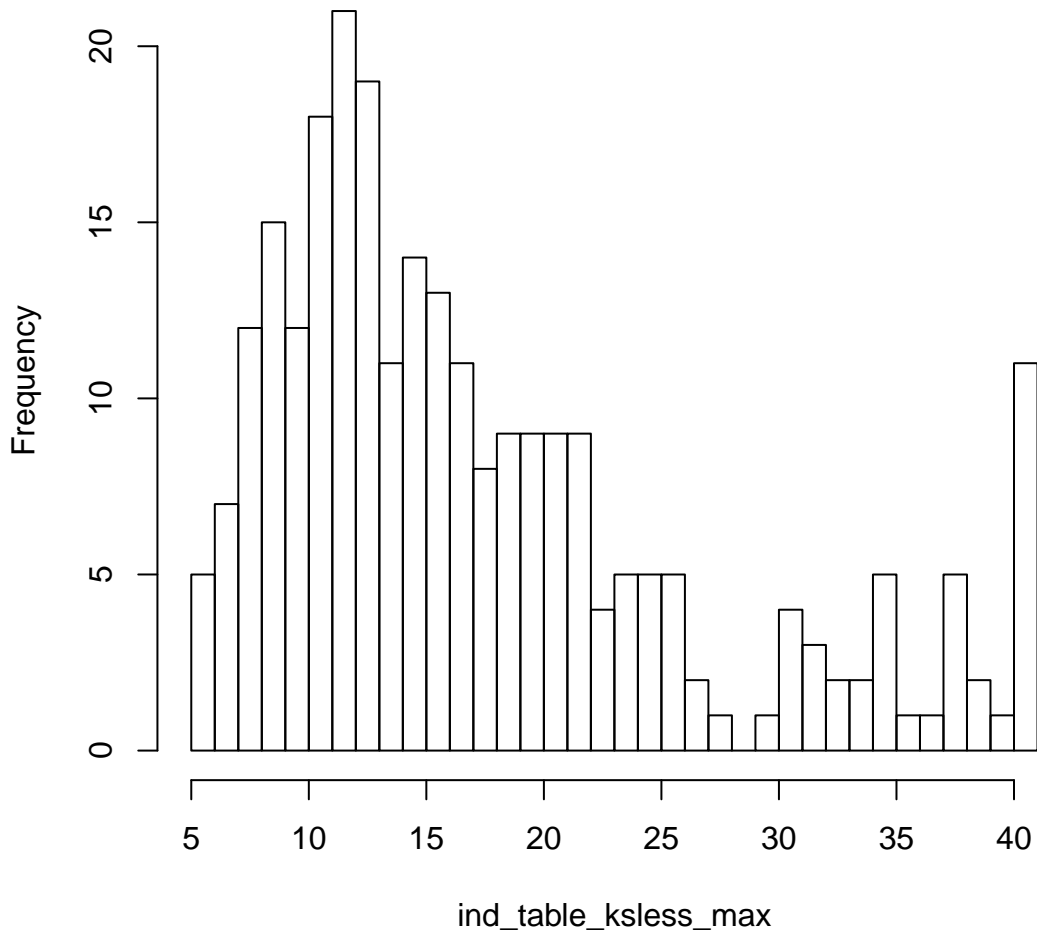
Histogram of ind_table_ksless_skewness



Histogram of ind_table_ksnonsig_skewness



Histogram of ind_table_ksless_max



Histogram of ind_table_ksnonsig_max

