## Report for PEP Section in mzTab File example\_5

The PEP section of the mzTab file contains 45,072 quantified peptide features measured in 54 samples.

	number of peptides
quantified	45,072
identified (total)	45,072
identified (unique modified)	35,080
identified (unique stripped)	31,307

Table 1: Total number of quantified and identified peptides.

modified sequence	accession	charge	retention time	$\overline{\mathrm{m/z}}$
no matching sequences found				

Table 2: Peptides of interest. Note that the script requires a vector of stripped peptides sequences, but in the above table we list the modified peptide sequences.

modified sequence	accession	$_{\rm charge}$	retention time	m/z
	no matching accessions found			

Table 3: Proteins of interest.

mod	specificity	number
Oxidation	M	8798
Methylthio	$\mathbf{C}$	7927
Dioxidation	M	372
Label: $13C(6)15N(4)$	$\mathbf{R}$	89
Label: 13C(6)15N(2)	K	79

Table 4: Statistics of modifications.

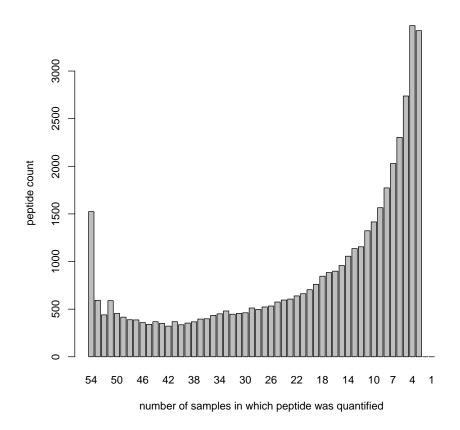


Figure 1: Frequency plot of peptide quantifications.

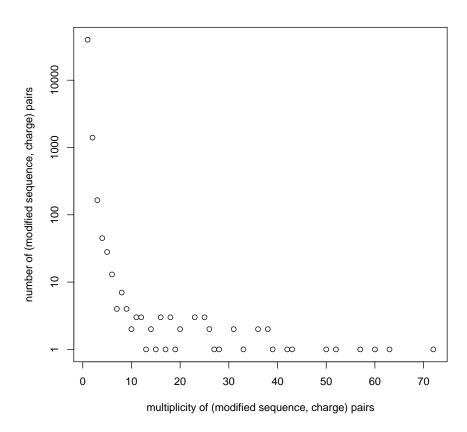
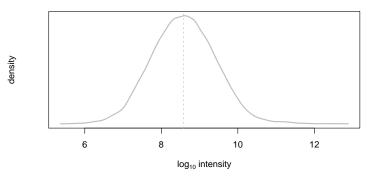
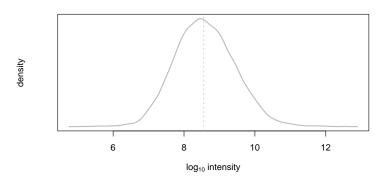


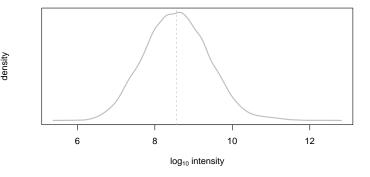
Figure 2: (modified sequence, charge) pair multiplicity vs frequency plot. Each peptide feature (characterised by a (possibly) modified peptide sequence and a charge state) should ideally occur only once in the analysis. In other words, peptides of multiplicity 1 should have a very high frequency. The plot below should show a significant spike on the left and can be used as QC of the analysis.



(a) peptide abundances 1, median (intensity) = 378, 509, 488



(b) peptide abundances 2, median(intensity) = 362, 260, 000



(c) peptide abundances 3, median (intensity) =357,520,000

Figure 3: peptide abundance distributions.

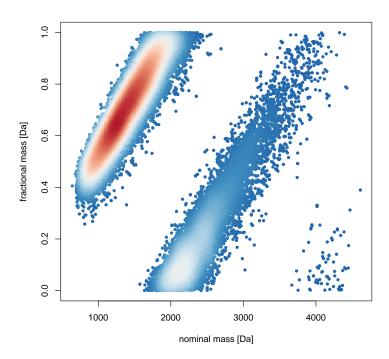


Figure 4: Kendrick nominal fractional mass plot

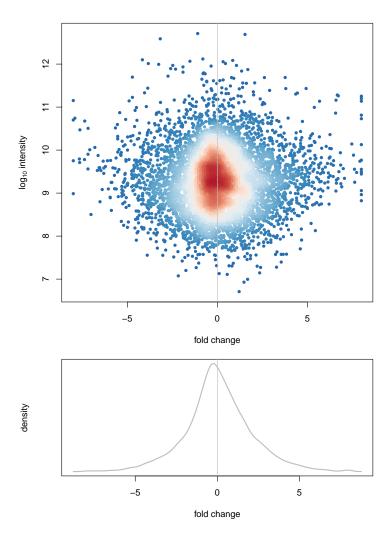


Figure 5: Fold changes of peptide abundances 1 and 2.  $median(fc) = -0.0034 \qquad sd(fc) = 2.0759$ 

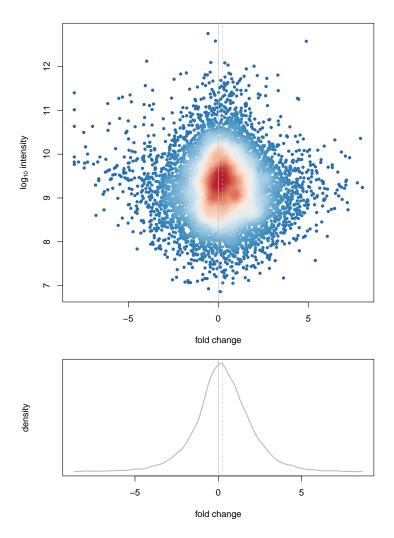


Figure 6: Fold changes of peptide abundances 1 and 3.  $median(fc) = 0.2428 \qquad sd(fc) = 1.7662$ 

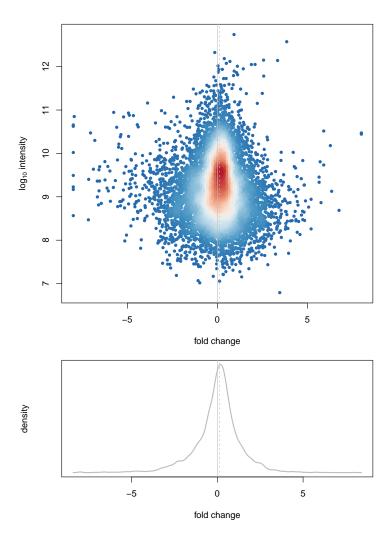


Figure 7: Fold changes of peptide abundances 2 and 3.  $median(fc) = 0.1159 \qquad sd(fc) = 1.3579$ 

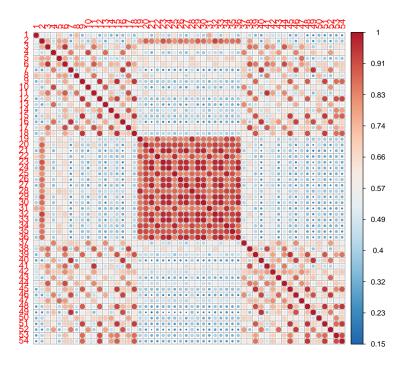


Figure 8: Pearson correlation of all peptide abundances. (min correlation = 0.1484, median correlation = 0.5701, max correlation = 1)

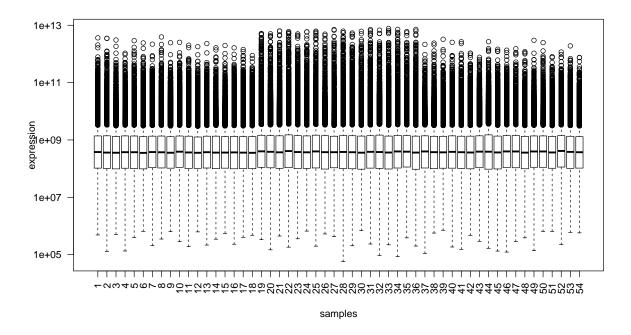


Figure 9: Boxplot of all peptide abundances.