iqpirQuant.php Multiplex Command	Explanation
RUN	Computes ion apportionments and writes results to file sample.N.iqpir.xls containing the channel apportionments for each ion and sample.N.numids.txt with the
RUN DE	Same as above but for deadends, writing results to deadend/ subdirectory in specified output directory
LOGRATIOS (DE)	Computes cross-link and cross-linked protein pair pairwise channel log2ratios specified in sample_ratios file, with normalization if specified, each written to file
LOGRATIOS INTRA	Same as above but for intra-protein cross-links only, written to intra_only/ subdirectory in specified output directory. If deadend quantitation was done, the intra-protein and
LOGRATIOS ALL (DE)	Computes all 30 pairwise channel cross-link and cross-linked protein pair log2ratios without normalization
LOGRATIOS ALLNORM (DE)	Computes all 30 pairwise channel cross-link and cross-linked protein pair log2ratios with normalization
LOGRATIOS APPORTS (DE)	Computes cross-link and cross-linked protein pair channel apportionments, averaged over all ions and written to output file sample.N.apports.txt and
UPLOAD DE_INTRA	Calculates combined deadend and cross-linked intra-protein log2ratios specified in sample_ratios file, and writes to file proteinratios_xxxx.txt, where xxx indicates the
WRITE PARAMS	Writes a template multi-channel igpir.params file
PRINTPARAMS	Prints a template multi-channel igpir.params file
< 2-channel iqpir.params file > WRITEPARAMS_MULTI	Convert 2-channel iqpir.params file to mutlti-channel iqpir_multi.params with proper fwd/rev channels and normalization options

## Example Commands

1. Quantify cross-links	igpirQuant.php igpir.params RUN followed by igpirQuant.php igpir.params LOGRATIOS
2. Quantify deadends	iqpirQuant.php iqpir.params RUN DE followed by iqpirQuant.php iqpir.params LOGRATIOS DE
3. Quantify cross-links and	Above steps 1 and 2 followed by iqpirQuant.php iqpir.params INTRA and iqpirQuant.php iqpir.params UPLOAD DE_INTRA
deadends and combine	
deadend/intra for proteome	
quantitation	