List of Tables

Table 1.1: Classes of anti-TB drugs and their mode of action .................................................. 25
Table 2.1: Effect of different ROS modulators on superoxide production by aerobically growing *Mycobacterium smegmatis* ................................................................. 56
Table 2.2: Effect of ROS modulators on XTT reduction by dormant culture of *Mycobacterium smegmatis* ........................................................................................................ 57
Table 3.1: Details of the primers used in Real Time PCR study ..................................................... 81
Table 3.2: Quantitative estimation of % dead cells after DPI treatment ........................................ 85
Table 3.3: Number of DPI treated *M. smegmatis* cells reduced in size ....................................... 88
Table 3.4: Development of resistance against anti-tubercular drugs ............................................ 88
Table 4.1: Summary of Differentially Regulated Genes compared to Aerobic (Active) .................. 105
Table 4.2: List of genes up-regulated under all three conditions ................................................... 107
Table 4.3: List of genes down-regulated under all three conditions ............................................. 126
Table 4.4: List of pathways differentially expressed under all three conditions, obtained from kegg pathways ..................................................................................................................... 150
Table 4.5: Details of selected pathways .......................................................................................... 151
Table 4.6: List of genes exclusively up-regulated in DPI treated sample ....................................... 163
Table 4.7: List of genes down-regulated exclusively in DPI treated sample ................................. 169
Table 4.8: Comparison of number of differentially regulated proteins in different dormant samples ................................................................................................................................. 177
Table 4.9: List of common proteins up-regulated under all three conditions ................................ 180
Table 4.10: List of common proteins down-regulated under all three conditions ......................... 181
Table 4.11: List of pathways obtained from kegg pathway database .............................................
which includes differentially expressed in DPI treated sample

Table 4.12: Proteins down-regulated at both transcriptional and translational level