A
Doubling time (h)
Paraquat mM
0 1 5 25 50 100 200 400
B
+PQ
-PQ
Cycle 1
Cycle 2
Cycle 3
Cycle 1
CCP1
SOD1
SOD2
Log2 FPKM ratio
Time (h)
E
Paraquat
Citric Acid
Citrulline
Glycine
Isoleucine
Arsenite
Rapamycin
Tryptophan
Frozen fossil record
Cycle 1
Cycle 2
Cycle 3-50
n = 8 × 96
C
Electron transport chain
Ascorbic acid
Vitamin C
Dehydroascorbic acid
PQ+
Blue
free radical state
PQ++
Colourless
Ionic state
O2
Molecular oxygen
O2-
Superoxide
D
Wildtype
sod2Δ
Cells
SC
PQ
SC + 180 mM VitC
PQ + 180 mM VitC
Time (h)