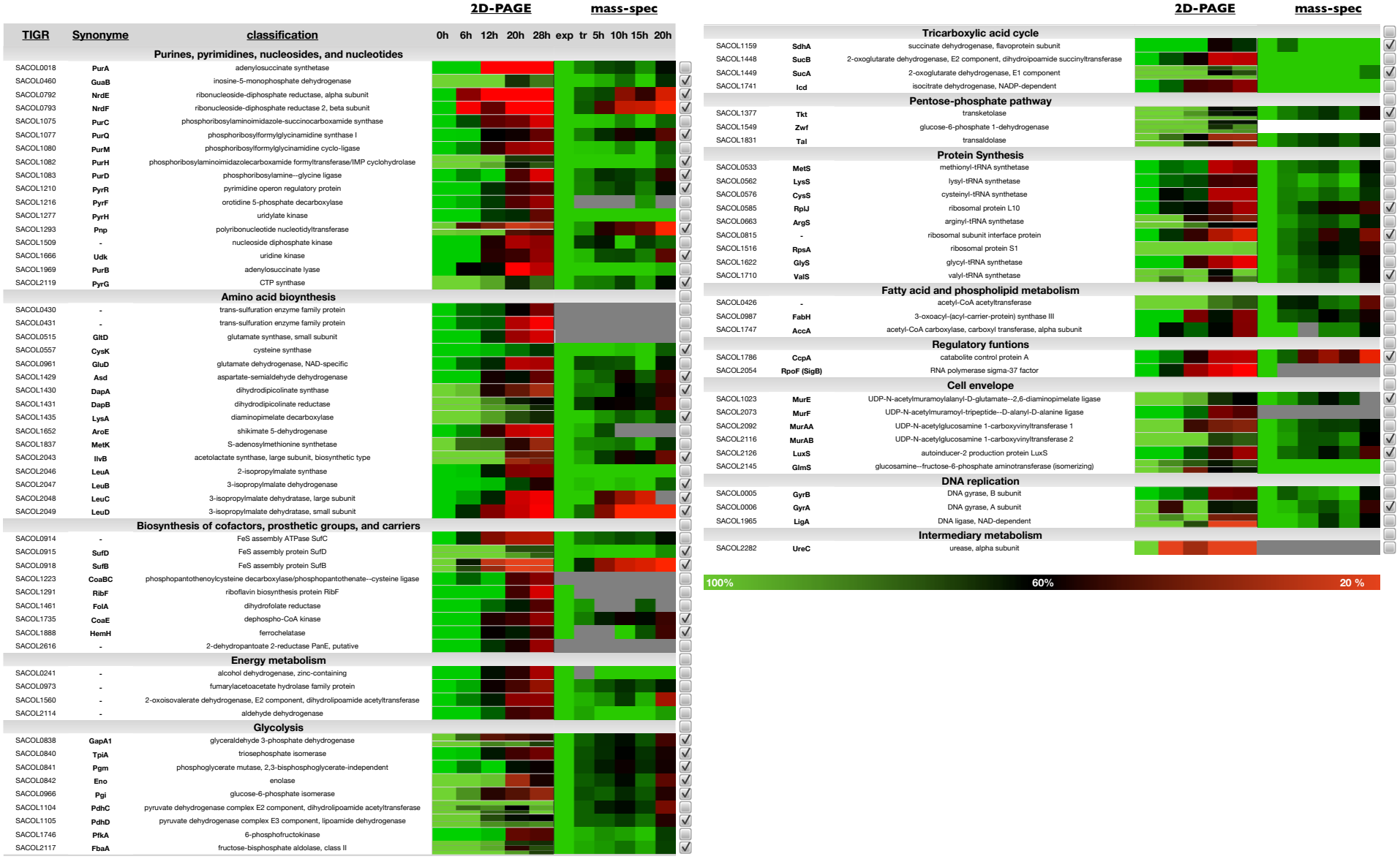
2D-PAGE
mass-spec
TIGR
Synonyme
classification
0h 6h 12h 20h 28h exp tr 5h 10h 15h 20h
Purines, pyrimidines, nucleosides, and nucleotides
SACOL0018 PurA adenylosuccinate synthetase
SACOL0460 GuaB inosine-5-monophosphate dehydrogenase
SACOL0792 NrdE ribonucleoside-diphosphate reductase, alpha subunit
SACOL0793 NrdF ribonucleoside-diphosphate reductase 2, beta subunit
SACOL1075 PurC phosphoribosylaminoimidazole-succinocarboxamide synthase
SACOL1077 PurQ phosphoribosylformylglycinamidine synthase I
SACOL1080 PurM phosphoribosylformylglycinamidine cyclo-ligase
SACOL1082 PurH phosphoribosylaminoimidazolecarboxamide formyltransferase/IMP cyclohydrolase
SACOL1083 PurD phosphoribosylamine--glycine ligase
SACOL1210 PyrR pyrimidine operon regulatory protein
SACOL1216 PyrF orotidine 5-phosphate decarboxylase
SACOL1277 PyrH uridylate kinase
SACOL1293 Pnp polyribonucleotide nucleotidyltransferase
SACOL1509 - nucleoside diphosphate kinase
SACOL1666 Udk uridine kinase
SACOL1969 PurB adenylosuccinate lyase
SACOL2119 PyrG CTP synthase
Amino acid bioynthesis
SACOL0430 - trans-sulfuration enzyme family protein
SACOL0431 - trans-sulfuration enzyme family protein
SACOL0515 GltD glutamate synthase, small subunit
SACOL0557 CysK cysteine synthase
SACOL0961 GluD glutamate dehydrogenase, NAD-specific
SACOL1429 Asd aspartate-semialdehyde dehydrogenase
SACOL1430 DapA dihydrodipicolinate synthase
SACOL1431 DapB dihydrodipicolinate reductase
SACOL1435 LysA diaminopimelate decarboxylase
SACOL1652 AroE shikimate 5-dehydrogenase
SACOL1837 MetK S-adenosylmethionine synthetase
SACOL2043 IlvB acetolactate synthase, large subunit, biosynthetic type
SACOL2046 LeuA 2-isopropylmalate synthase
SACOL2047 LeuB 3-isopropylmalate dehydrogenase
SACOL2048 LeuC 3-isopropylmalate dehydratase, large subunit
SACOL2049 LeuD 3-isopropylmalate dehydratase, small subunit
Biosynthesis of cofactors, prosthetic groups, and carriers
SACOL0914 - FeS assembly ATPase SufC
SACOL0915 SufD FeS assembly protein SufD
SACOL0918 SufB FeS assembly protein SufB
SACOL1223 CoaBC phosphopantothenoylcysteine decarboxylase/phosphopantothenate--cysteine ligase
SACOL1291 RibF riboflavin biosynthesis protein RibF
SACOL1461 FolA dihydrofolate reductase
SACOL1735 CoaE dephospho-CoA kinase
SACOL1888 HemH ferrochelatase
SACOL2616 - 2-dehydropantoate 2-reductase PanE, putative
Energy metabolism
SACOL0241 - alcohol dehydrogenase, zinc-containing
SACOL0973 - fumarylacetoacetate hydrolase family protein
SACOL1560 - 2-oxoisovalerate dehydrogenase, E2 component, dihydrolipoamide acetyltransferase
SACOL2114 - aldehyde dehydrogenase
Glycolysis
SACOL0838 GapA1 glyceraldehyde 3-phosphate dehydrogenase
SACOL0840 TpiA triosephosphate isomerase
SACOL0841 Pgm phosphoglycerate mutase, 2,3-bisphosphoglycerate-independent
SACOL0842 Eno enolase
SACOL0966 Pgi glucose-6-phosphate isomerase
SACOL1104 PdhC pyruvate dehydrogenase complex E2 component, dihydrolipoamide acetyltransferase
SACOL1105 PdhD pyruvate dehydrogenase complex E3 component, lipoamide dehydrogenase
SACOL1746 PfkA 6-phosphofructokinase
SACOL2117 FbaA fructose-bisphosphate aldolase, class II
2D-PAGE
mass-spec
Tricarboxylic acid cycle
SACOL1159 SdhA succinate dehydrogenase, flavoprotein subunit
SACOL1448 SucB 2-oxoglutarate dehydrogenase, E2 component, dihydroipoamide succinyltransferase
SACOL1449 SucA 2-oxoglutarate dehydrogenase, E1 component
SACOL1741 Icd isocitrate dehydrogenase, NADP-dependent
Pentose-phosphate pathway
SACOL1377 Tkt transketolase
SACOL1549 Zwf glucose-6-phosphate 1-dehydrogenase
SACOL1831 Tal transaldolase
Protein Synthesis
SACOL0533 MetS methionyl-tRNA synthetase
SACOL0562 LysS lysyl-tRNA synthetase
SACOL0576 CysS cysteinyl-tRNA synthetase
SACOL0585 RplJ ribosomal protein L10
SACOL0663 ArgS arginyl-tRNA synthetase
SACOL0815 - ribosomal subunit interface protein
SACOL1516 RpsA ribosomal protein S1
SACOL1622 GlyS glycyl-tRNA synthetase
SACOL1710 ValS valyl-tRNA synthetase
Fatty acid and phospholipid metabolism
SACOL0426 - acetyl-CoA acetyltransferase
SACOL0987 FabH 3-oxoacyl-(acyl-carrier-protein) synthase III
SACOL1747 AccA acetyl-CoA carboxylase, carboxyl transferase, alpha subunit
Regulatory funtions
SACOL1786 CcpA catabolite control protein A
SACOL2054 RpoF (SigB) RNA polymerase sigma-37 factor
Cell envelope
SACOL1023 MurE UDP-N-acetylmuramoylalanyl-D-glutamate--2,6-diaminopimelate ligase
SACOL2073 MurF UDP-N-acetylmuramoyl-tripeptide--D-alanyl-D-alanine ligase
SACOL2092 MurAA UDP-N-acetylglucosamine 1-carboxyvinyltransferase 1
SACOL2116 MurAB UDP-N-acetylglucosamine 1-carboxyvinyltransferase 2
SACOL2126 LuxS autoinducer-2 production protein LuxS
SACOL2145 GlmS glucosamine--fructose-6-phosphate aminotransferase (isomerizing)
DNA replication
SACOL0005 GyrB DNA gyrase, B subunit
SACOL0006 GyrA DNA gyrase, A subunit
SACOL1965 LigA DNA ligase, NAD-dependent
Intermediary metabolism
SACOL2282 UreC urease, alpha subunit
100%
60%
20 %

Figure S13

Figure S13:

Comparison of results obtained by 2D-PAGE (Michalik *et al.*, 2009) and a MS-based pulse-chase approach. red: protein is degraded or protein shifts into non-soluble fraction; green: protein remains stable.