

**(a)**arcA  
cra  
fur

GO:0006091 - generation of precursor metabolites and energy  
 GO:0006099 - tricarboxylic acid cycle  
 GO:0006598 - polyamine catabolic process  
 GO:0006826 - iron ion transport  
 GO:0006879 - cellular iron ion homeostasis  
 GO:0006979 - response to oxidative stress  
 GO:0009060 - aerobic respiration  
 GO:0009239 - enterobactin biosynthetic process  
 GO:0015688 - iron chelate transport  
 GO:0015980 - energy derivation by oxidation of organic compounds  
 GO:0016226 - iron- sulfur cluster assembly  
 GO:0045333 - cellular respiration  
 GO:0055072 - iron ion homeostasis  
 GO:0055114 - oxidation- reduction process  
 GO:0097428 - protein maturation by iron- sulfur cluster transfer

**(b)**arcA  
cra  
fnr  
narL

GO:0006066 - alcohol metabolic process  
 GO:0006091 - generation of precursor metabolites and energy  
 GO:0006113 - fermentation  
 GO:0009061 - anaerobic respiration  
 GO:0015980 - energy derivation by oxidation of organic compounds  
 GO:0019645 - anaerobic electron transport chain  
 GO:0022904 - respiratory electron transport chain  
 GO:0032445 - fructose import  
 GO:0042126 - nitrate metabolic process

