alaS aspS cysS dnaE dnal dna\ dna∑ engB fabG frr ftsA ftsY ftsZ gltX ğmk gyrE his ileS infA infB inf leuS ligA mra<u>\</u> mur[ murŌ phes prfB proS prs pyrH rib<u>F</u> rplB rplC rþl rpil rpil rplM rplN rplO rplP rplQ rplV rplW rpoA rpo<u>B</u> rpol rps( rpsĎ rpsE rpsC rpsl rps rpsK rpsL rpsM sec1 serS thrS tmk tsf tyrS uppS valS\_ асрР bamA dapE dapt dxi dxs fabZ glmM ğlmU ğlyŚ řém( ispE ispC lolC **IspA** mur/ mur( murl nus( pheT ppa pyr( rpiK rplR rpmB tàdA yidC der fmt fusA groL **l**ysS map rpsB adk dap/ erpA fabB fbaA folD ftsH ftsl ftsW gcp glnS groS holA holB ispl ispH lepB lgt lolD mviN nrdB pgk ppnK ribĄ rimN rplJ rplL rplS ŗplU rpm[ rpoH rpsA rpsN rpsP rpsQ rpsŠ secA tilS trmD ybeY yea<u>Z</u> yqgl ssb argS ffh gyrA metK nusA acpS asd asnS bamD cca dapD def dnaG dut eno fabl fldÃ folC gapA glyQ ĩspĎ metC murB murl nusB obg pth rho rib<u>E</u> rib[ ribl ribH imÑ rpmA rpsR rpsU suhB dnaĀ era murF rpo( cdsĂ çoaE hemH ispB kdtA lptD **IpxA** lpxB lpx( lpx[ lþxK pgsA secD yjgĆ accA accB acc( acc[ coaBC fabA ftsQ kdsA kdsB lolA IoIB lpxl **Essentiality** mrdA 0 rpm( sec yjeE yjgP coaA coaE dna( dnal fabD fabH folB folE glmS ñem₽ hemB hem[ hemE hemG **lexA** Int **lptA** lptE mrdB mre( mreD msbA mukB mukl mukl nadl nadĒ plsB plsC priĄ psd pssA rnpA rplY rpm<u>H</u> rpsT sect thyA topA ubiA ubiB ubil ubil zipĀ iscS rpsĺ nrdA purB acel aceF ackA ahp( apal aroA aroB aro( aro aroK aroQ atp<u>A</u> atpB atp( atpD atpE atpF atpG atpH carA carB clpP clpX cls csrA cyoA cyoB cyoC cýoÈ cysE dapF deaD dksĄ dnaJ dnaK dņaQ efp folA fpr gloB glyA gnd gpm/ greA grpE grxD hflC hflK hinT hisA hisE his hisG hisH hisł htpX iscA lon **IpdA** metE miaĀ minC min mnmA mnmE mnmC nfuA nth nuoA nuoB nuo( nuol nuoC nuol nuol nuoJ nuoK nuol nuoM̄ nuoN orn pepA pfkA pgi pgl piťA pnp prmC ptsH in AHAABDENCD Struck ABDENCD STRUCK ABDENCD ET PRINTER PROBLES OF SENSOR Gammaproteobacteria Enterobacteriaceae Endosymbiont **Proteobacteria** Bacteria