

**Supplementary Table 1a: List of High Expression genes considered in this study**

<b>List of High Expression Genes (297 genes)</b>
cdd, hemB, aroG, kbl, ddlA, thrS, yicC, entC, fliY, glf, pyrB, ftsZ, carB, nuoA, ygfB, hscB, glnH, yfbU, kdgR, ygiN, yceD, hslU, yffB, yibN, yoaB, thrC, sspB, yebY, osmC, ychN, hpt, smpA, fmt, accA, nuoB, mog, ybeB, hisJ, glmM, nrdA, aspS, sucC, speA, ybeZ, tolB, glpK, asnA, galU, dapA, ldhA, gyrA, wrbA, moaB, seqA, orn, ydgH, dsbC, folD, ompF, ahpF, gshB, secY, gatA, fabF, ssb, atpH, rpoD, ycgK, accB, yrbC, minD, fabH, sucA, metG, gltA, glmS, accC, gpt, lrp, purM, pyrG, thiC, cysK, rcsB, nfsA, mreB, uspA, yqjD, pheT, lon, nusG, valS, tyrS, clpB, glnS, purU, def, yajC, pheS, artI, prfB, alaS, aroK, gcvT, metK, serS, ftnA, fklB, sspA, yeaD, proX, crp, deaD, atpA, znuA, degP, purH, htpG, yjgA, stpA, fdx, yajG, menB, panB, aspC, ybbN, sucB, panD, ileS, asnS, surA, gltX, rpiA, proS, pepD, pta, sucD, glyS, infB, yggE, nusA, greA, leuS, potD, ompT, dut, ibpA, trpS, trxA, yeeX, arcA, purE, upp, clpP, yodA, tsx, luxS, typA, lysS, purB, prs, proQ, dsbA, deoB, ribB, bcp, atpD, secB, glyQ, suhB, yajQ, dksA, guaA, fabZ, pgi, purC, mdh, ybgF, speB, apt, ompC, araA, iscS, dps, kdsA, atpC, trxB, adk, rplU, ppiB, rpoC, slyB, fkpA, rho, rbsB, serA, can, pal, tktA, ndk, asd, adhE, rpoB, ptsI, pnp, serC, efp, sodB, slyD, hfq, udp, yjgF, ybaB, eda, purA, ppa, glnA, rpoA, aceF, yncE, talB, rpsK, icd, yebC, guaB, rpsI, rpsH, deoA, rplK, fabD, glyA, ackA, rplP, oppA, pflB, dapD, fabI, tpx, rpsJ, yifE, fir, fabG, gnd, fabB, gpmA, aceE, rplT, grpE, rplI, rplF, rplJ, rplS, rplN, fabA, infC, rplD, rpsF, tpiA, ompA, rpsM, tig, ompX, dnaK, rplE, soda, rplO, rplB, rpsE, deoD, fbaA, fusA, eno, groL, rplM, rpsL, tsf, deoC, rplC, rpsC, rplA, tufA, rpsD, rpsB, rplQ, pgk, rpsG, rplR, gapA, ahpC, hns, rpsA, crr, rplW, rplX, rpsN, rplL, rplV

**Supplementary Table 1b: List of Low Expression genes considered in this study**

<b>List of Low Expression Genes (297 genes)</b>
yhdP, fdnG, pqqL, mrcA, evgS, dmsA, metL, helD, glnE, mutS, yghJ, uvrD, ybiW, dld, yebT, spoT, htrE, mglA, ligA, rmuC, xdhD, glgB, arcB, bisC, narG, ydeP, yheS, hrpA, ytfN, yefJ, parE, ybiO, acs, dnaA, glcB, speC, hsdR, mqo, alsA, acrF, nrfA, hipA, gspA, ilvD, narH, yfaA, ydbK, yfjI, ydbD, sapA, metH, poxB, menD, ycgV, frdA, eutB, lysC, gabT, araF, dusA, ynjE, dadA, kefA, uup, rsmB, sohB, plsB, tyrR, amn, dsdA, trmA, torC, cusB, ltaE, yahI, ampC, yhiN, malQ, yehM, lplA, yhiI, rfaF, waaA, yadG, epd, tdcB, maoC, srmB, murG, yjcE, oxyR, glgA, ruvB, yigL, feoB, ygdH, ftsK, yggR, ygiS, ispD, djlA, yaiW, pntA, iclR, cytR, baeR, gntT, cfa, hflX, nagZ, pyrD, murE, parC, sufC, ybfF, yneE, yfeR, nlpI, pssA, folP, rluD, emrA, pqiB, dcyD, ykgE, glnL, thiD, yghQ, tesA, udk, mak, ybiC, truB, speG, cmtB, rhIE, gpsA, ilvI, lnt, ybgK, yhdH, yjiA, pcnB, tktB, pepT, cpdB, ycbC, queA, lolE, evgA, rimJ, murF, pntB, sthA, nupC, ydhF, yhbW, rob, purN, rseB, lamB, mfd, yffS, msbA, gsp, gntR, dsbG, uspE, murB, corA, yciT, fpr, cysQ, intD, fbaB, yceI, fdhD, prfA, malK, galT, pyrF, mdaB, lexA, ycfH, yaaA, hisC, argT, degQ, lolB, potF, glpD, ucpA, trpA, kdgK, nanE, gatC, yacF, yqjI, ispB, secF, araC, prmA, rpoE, narL, yeeZ, hemE, tmk, aroC, yjhU, btuB, tldD, ybiT, rhIB, minC, yecD, pitA, yceH, dcd, msrB, lolD, rfbC, fdhE, tatB, yeaZ, ycbL, ygiM, araD, murC, gshA, ubiD, yjiY, nadB, bglX, usg, pncB, ygcF, yjaG, prc, slp, fre, yccU, moeA, thiM, yciO, aroD, yaiL, proB, ydhQ, glpG, gmhB, yieP, htpX, rnr, hemC, dapE, clpA, avtA, hchA, ushA, treC, pdxK, sdaA, tas, add, nagD, modE, yiiM, yniC, fadR, rna, fdoH, ldcA, gltI, fepA, solA, rlmB, yhbP, azoR, cysE, pdxH, glnQ, tesB, glk, yibF, trmD, cyaY, ycdX, truD, fumA, yegQ, ispH, yraM, artJ, nudE, polA, uvrA, mukB