



Figure S2. Model of alginate biosynthesis, regulatory and genotypic switching of *L. interrogans* in reference to proteins involved in alginate synthesis in *P. aeruginosa* PA01. Biosynthesis of alginates is initiated by conversion of fructose-6-phosphate to GDP-Mannuronic acid in the cytoplasm catalyzed by the products of *algA*, *algC* and *algD*. Further conversion, i.e. polymerisation (*alg8* and *alg44i*), acetylation (*algI*, *algJ*, *algF* and *algX*), epimerization (*algG*) and exportation (*algK* and *algE*), takes places. Protein homology was shown to be high (red) for proteins involved in alginate biosynthesis steps in the cytoplasm (*algA* and *algD*) and inner membranes

(*algI*). There is no sequence homology between *L. interrogans* and *P. aeruginosa* for polymerization (inner membrane), epimerization (periplasmic), and exportation (outer membrane), suggesting different enzymes or mechanisms in *L. interrogans*.