As detailed by Andersson et al. [12], amino acid metabolism is deficient in Rickettsia. Among all complete bacterial genomes, Chlamydia is the sole genus exhibiting exactly the same pattern. In Rickettsia, glutamate metabolism is lacking (MAP00251) with the exception of aspartate aminotransferase A (aatA, EC 2.6.1.1) which is responsible for converting 2–oxoglutarate into L–glutamate. All others bacteria, including T. whipplei, Coxiella burnetti and Borrelia burgdorferi are much better equipped with enzymes .for amino acid metabolism