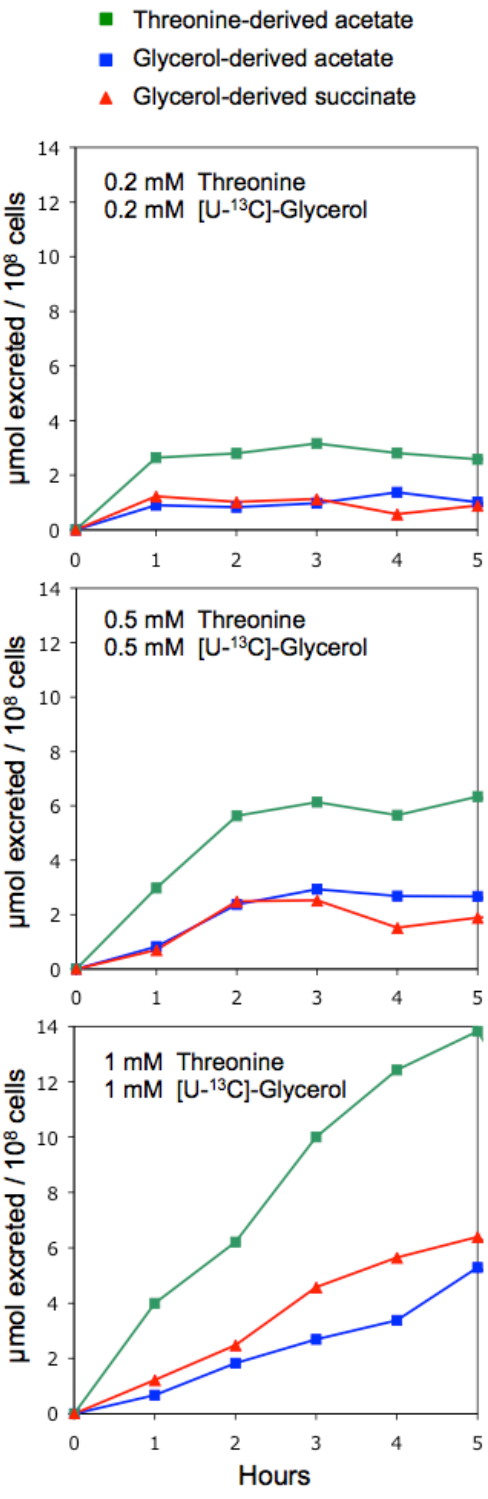
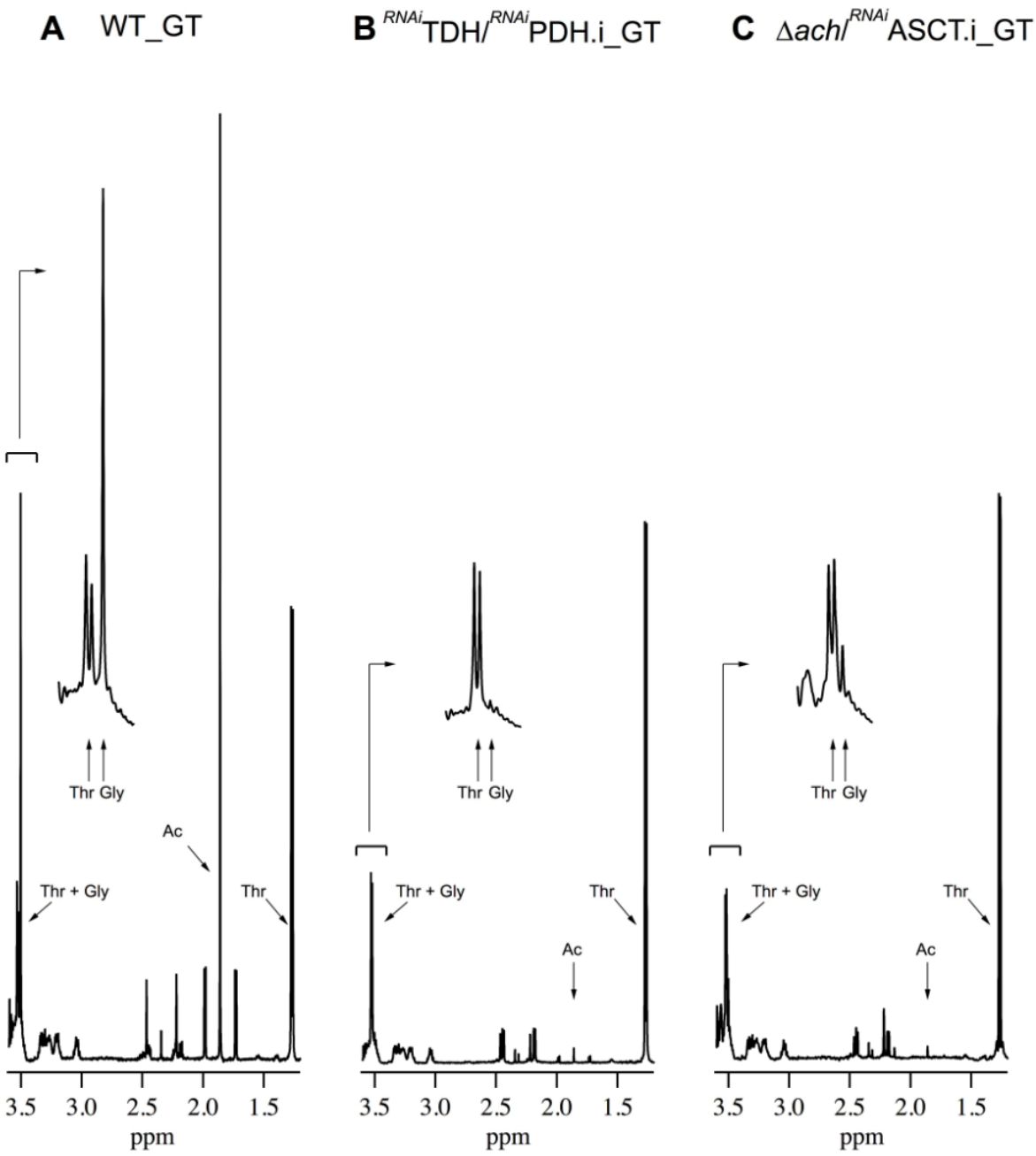
Figure S1



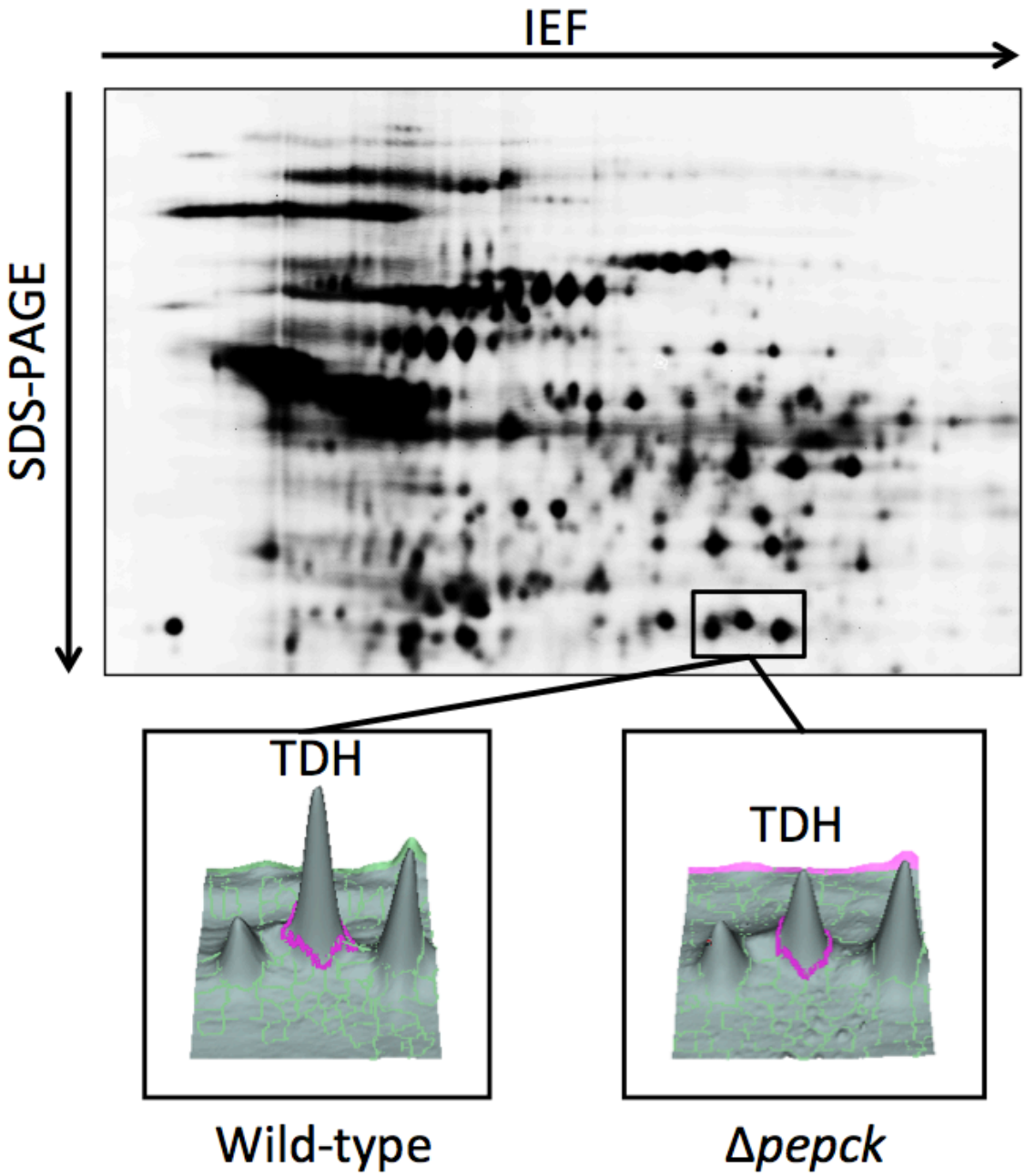
Kinetic of acetate and succinate production from low amounts of threonine and glycerol. The amounts of acetate and succinate produced by the wild type trypanosomes incubated in PBS containing 0.2, 0.5 or 1 mM of [U-^{13}C]-glycerol and threonine were determined by ^{1}H-NMR every hour during 5 h. The initial rate of acetate production for threonine is in the same range regardless of the amounts of carbon sources.

Figure S2



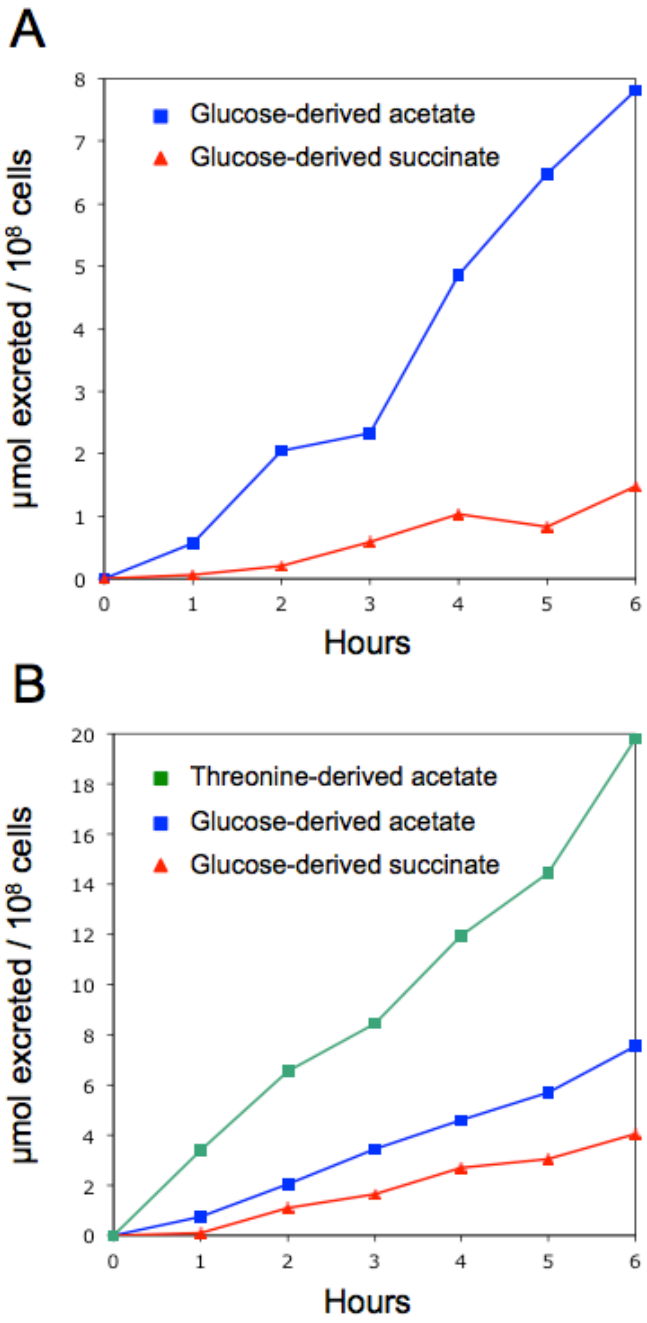
Production of glycine from threonine. Metabolic end-products (in particular acetate and glycine) excreted by the procyclic wild type cell line (A), the ^{RNAi}TDH/^{RNAi}PDH.i (B) and Δ*ach*/^{RNAi}ASCT.i (C) mutant from D-[U-^{13}C]-glucose and threonine was determined by ^{1}H-NMR. For more details see Fig. 2. A part of each spectrum ranging from 1.2 to 3.6 ppm is shown. A high resolution of the 3.5-3.6 ppm area is shown in the inset to separate the threonine doublet and the glycine singlet.

Figure S3



Difference gel electrophoresis (DIGE) analysis of wild type and Δ*pepck* procyclic form *T. brucei.* Four biological replicates of each line were compared by multiplex DIGE analysis, utilizing a pooled internal standard. A protein spot that was found to be down regulated in the Δ*pepck* by 1.5 fold (p=4.0 e-6; n=4) was identified as threonine dehydrogenase (TDH). Fold change indicates average change in standardized abundance. A representative 2D gel spot map is shown, with an inset box showing the location of the spot identified as TDH. The difference in spot intensity between wild type and Δ*pepck* is illustrated by 3 dimensional representations of spot volume.

Figure S4



Kinetic of acetate and succinate production. The amounts of acetate and succinate produced by the wild type trypanosomes incubated in PBS containing [U-^{13}C]-glucose (A) or [U-^{13}C]-glucose and threonine (B) were determined by ^{1}H-NMR every hour during 6 h. Production of the excreted end product is linear during the whole experiment.