

**Fig. S1:** Immunological detection of the PceA and PceT protein in crude extracts (E) and particulate fractions (P) obtained from cells of *S. blattae* strains expressing the *pceA* and *pceT* gene from *D. hafniense* Y51. The particulate fractions were obtained by low-speed centrifugation after cell disruption (for details see the Materials and Methods section). The cells were cultivated in the absence of fumarate and in the presence of 0.02% yeast extract. *S. blattae* strains used: AMN1 ( $pceA_{Y51}$ -CStrep), AMN2 (NStrep- $pceA_{Y51}$ ), and AMN3 (NStrep- $pceA_{Y51}$ ,  $pceT_{Y51}$ -CStrep). DMB = 5,6-dimethylbenzimidazole, OH-B<sub>12</sub> = hydroxocobalamin. The immunoblot was developed with antibodies directed against the Strep-tag. Crude extracts and resuspended particulate fractions were separated on a 12.5% SDS-PAGE (10 µg protein per lane). The PceA protein in the particulate fraction displayed a retarded migration (#). A degradation product of PceT-Strep is marked by an asterisk.

**Fig. S2:** Structure of pseudovitamin  $B_{12}$  ( $Co_{\beta}$ -cyano- $Co_{\alpha}$ -adeninyl-cobamide). The position of carbon atom 176 is indicated.