Figure 2 Specificity of different trehalases and linearity of the fluorometric assay of trehalose. Hydrolysis of trehalose and other disaccharides by (A) porcine kidney trehalase and (B) *E. coli* cytoplasmic trehalase (treF). The amount of glucose released after addition of trehalase was determined in an end-point assay using glucose oxidase, peroxidase and Amplex Red®. The increase in fluorescence is expressed in arbitrary fluorescence units. The linearity of the optimised kinetic assay for trehalose using *E. coli* cytoplasmic trehalase was tested with 0-5 pmol trehalose (C) and 0-40 pmol trehalose (D). The initial rate of the reaction was monitored fluorometrically (arbitrary fluorescence units min⁻¹). Data are mean ± SD (*n* = 2 or 3).