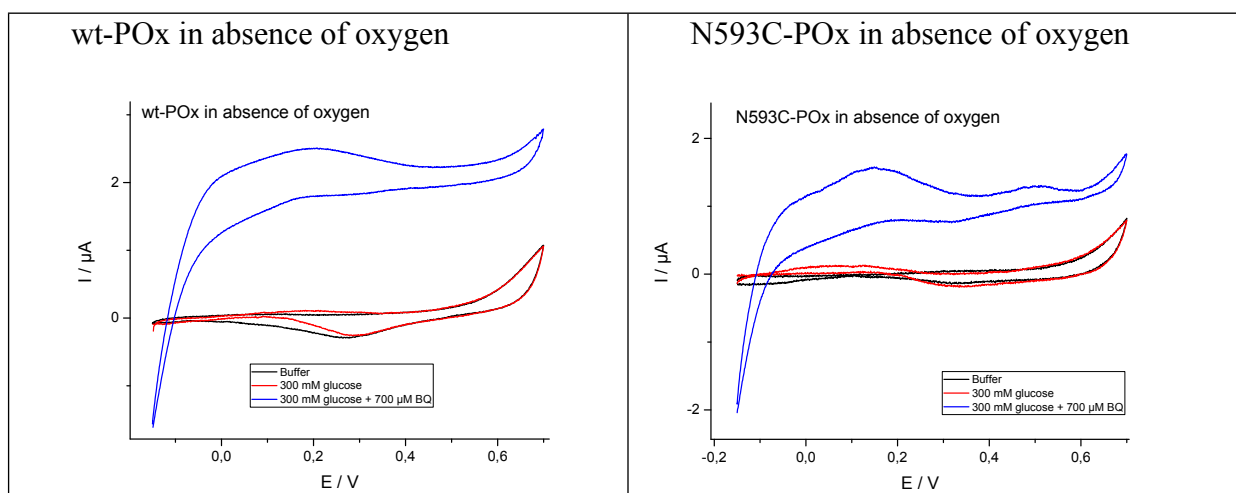


Supporting information

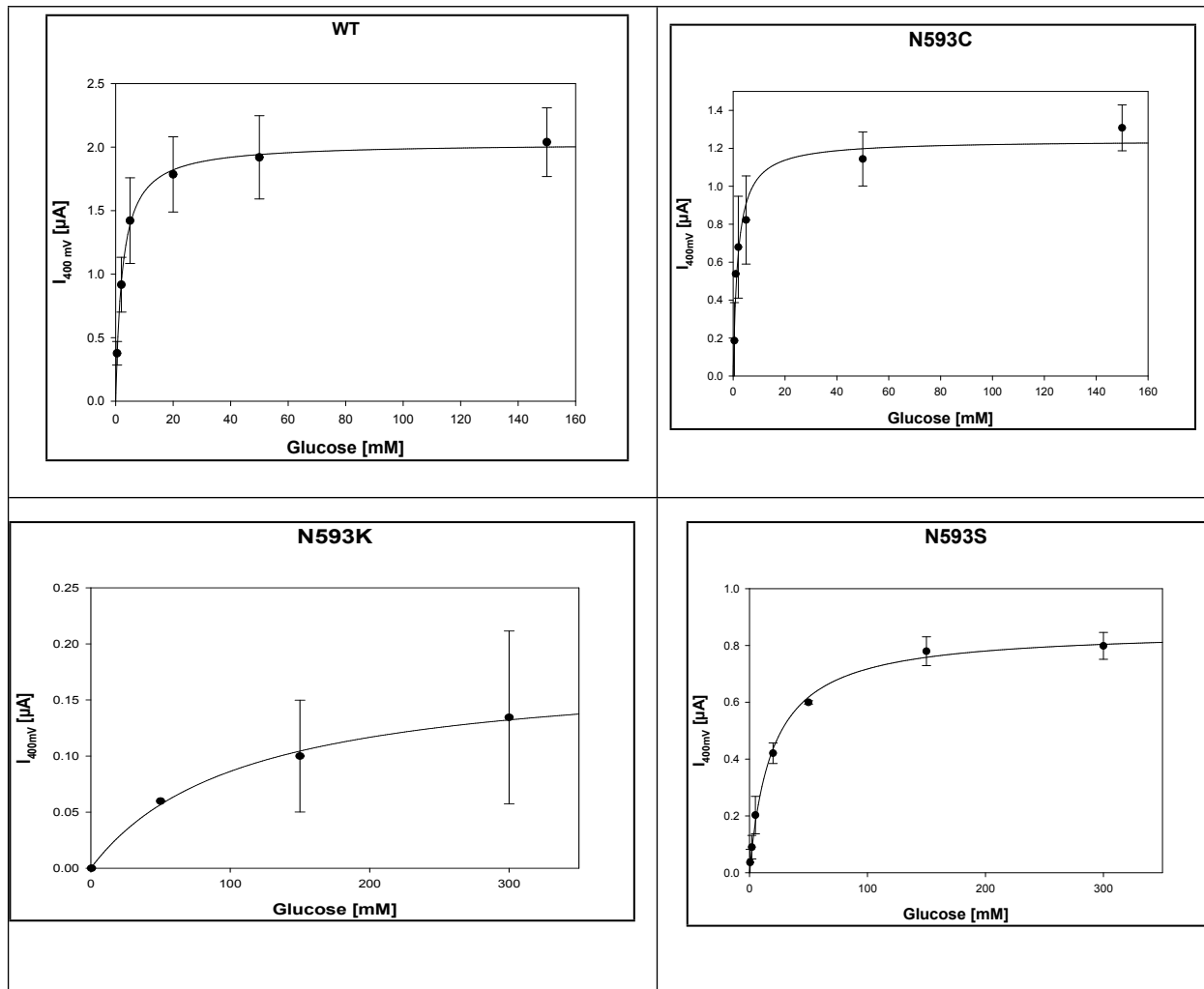
Manuscript ID: CP-ART-08-2016-006009

TITLE: Electrochemical characterization of the pyranose 2-oxidase variant N593C shows a complete loss of the oxidase function with full preservation of substrate (dehydrogenase) activity

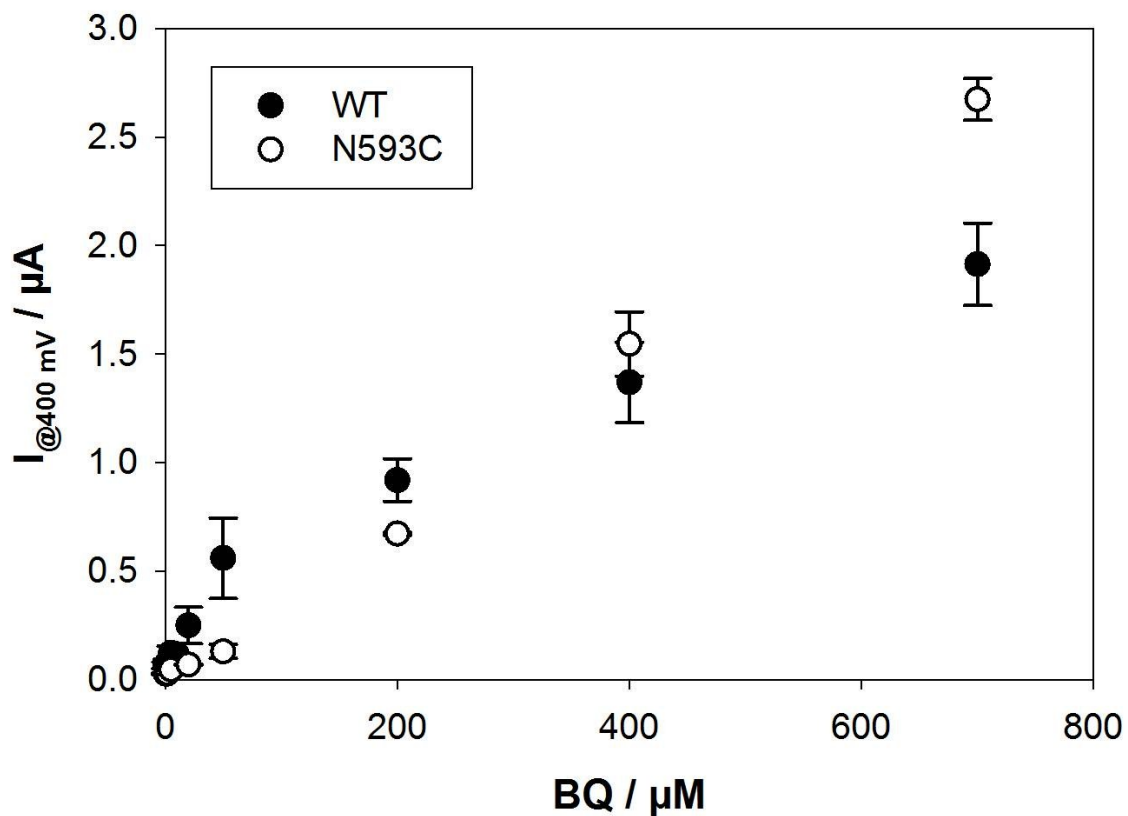
SI.1. CVs recorded in anaerobic conditions (in glove box under nitrogen atmosphere and degassed solutions)



SI-2 Michaelis-Menten curves for glucose in presence of fixed concentration of mediator (1,4-BQ 700 μ M) and resulting K_m and I_{max} for wt-POx, N593C-POx and two other variants at position 593, namely N593K and N593S.



SI-3 Absence of oxygen as an interference is visible also in the linearity/dependency for N593C-POx variant of the resulting currents obtained at constant concentrations of glucose (300 mM glucose) and variable concentrations of BQ.



SI-4 Denaturation/Inhibition of enzyme: Treatment of enzyme modified electrodes for 1 h at 70°C (blue CV-in buffer; orange CV-in 300 mM glucose; green CV- in 300 mM glucose and 700 μ M BQ).

