

Supplementary material to:

A PQS-Cleaving Quorum Quenching Enzyme Targets Extracellular Membrane Vesicles of *Pseudomonas aeruginosa*

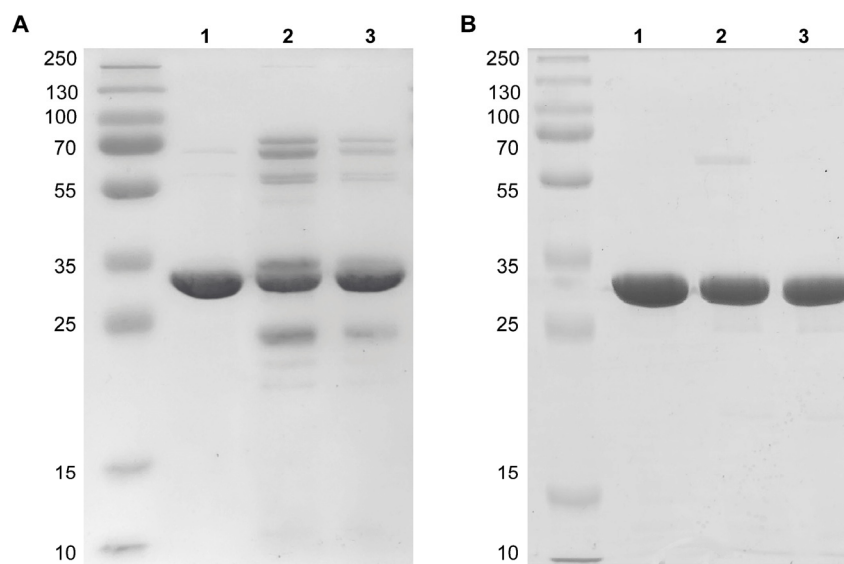


Figure S1. Apparent interaction of the PQS dioxygenases with extracellular proteins of *Pseudomonas aeruginosa* PA14, indicated by co-elution of **(A)** HQD_{S.b.} and **(B)** AqdC with proteins from *P. aeruginosa* PA14 culture supernatant. 12.5% SDS-PAGE (Coomassie-stained). Lanes 1: HQD_{S.b.} (A) and AqdC (B) purified by Ni²⁺-NTA affinity chromatography; lanes 2: HQD_{S.b.} (A) and AqdC (B) were incubated for 1 hour with PA14 supernatant and subsequently subjected to Ni²⁺-NTA affinity chromatography; lanes 3: HQD_{S.b.} (A) and AqdC (B) were loaded to the Ni²⁺-NTA column and washed with PA14 supernatant prior to elution. PageRuler™ Plus Prestained Protein Ladder (Thermo Scientific) was used as marker with molecular masses provided in kDa.

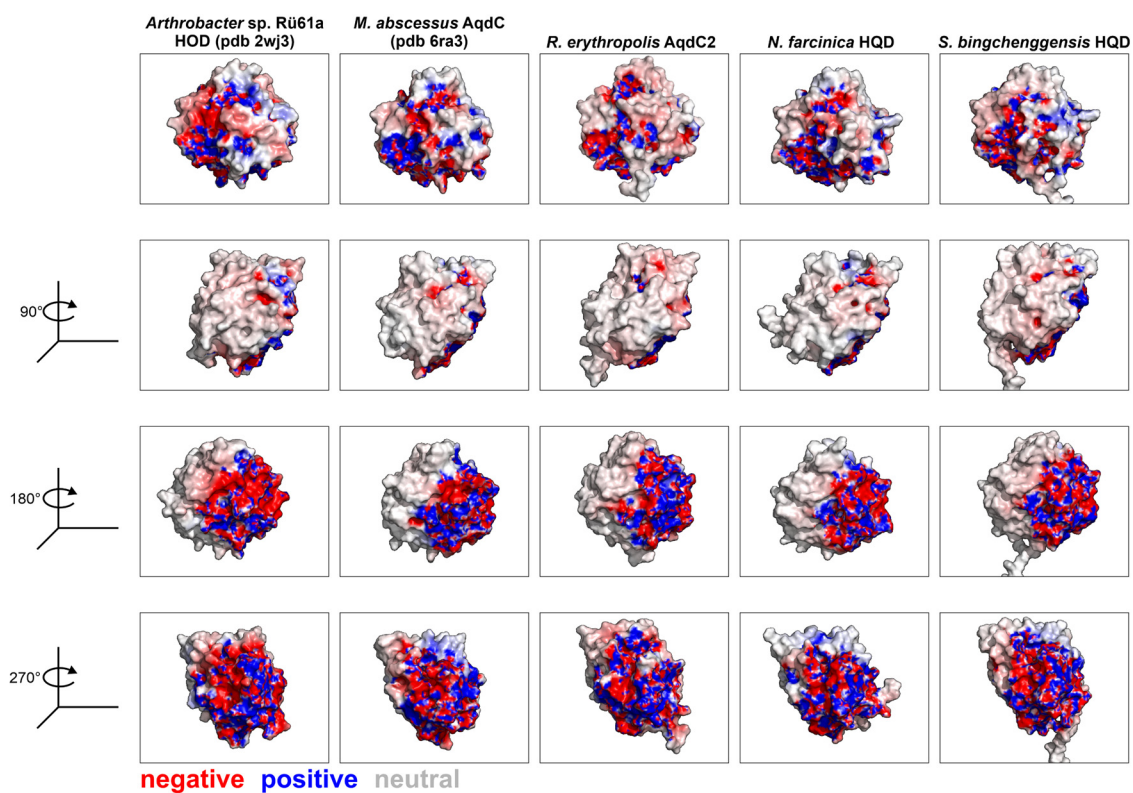


Figure S2. Scheme of the electrostatic surface potential of the dioxygenases HOD, Aqdc, Aqdc2, HQD_{N.f.} and HQD_{S.b.}. Structural models of the enzymes were generated with AlphaFold [49,50] and their electrostatic properties were calculated using the Poisson-Boltzmann equation. Blue and red represent positive and negative electrostatic surface potential, respectively, whereas white color indicates neutral electrostatic surface potential.