Arg375 Tunes Tetrahydrobiopterin Functions and Modulates Catalysis by Inducible Nitric Oxide Synthase

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Running title: Catalytic activities of Arg375 mutants of iNOSoxy

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Fig. S1

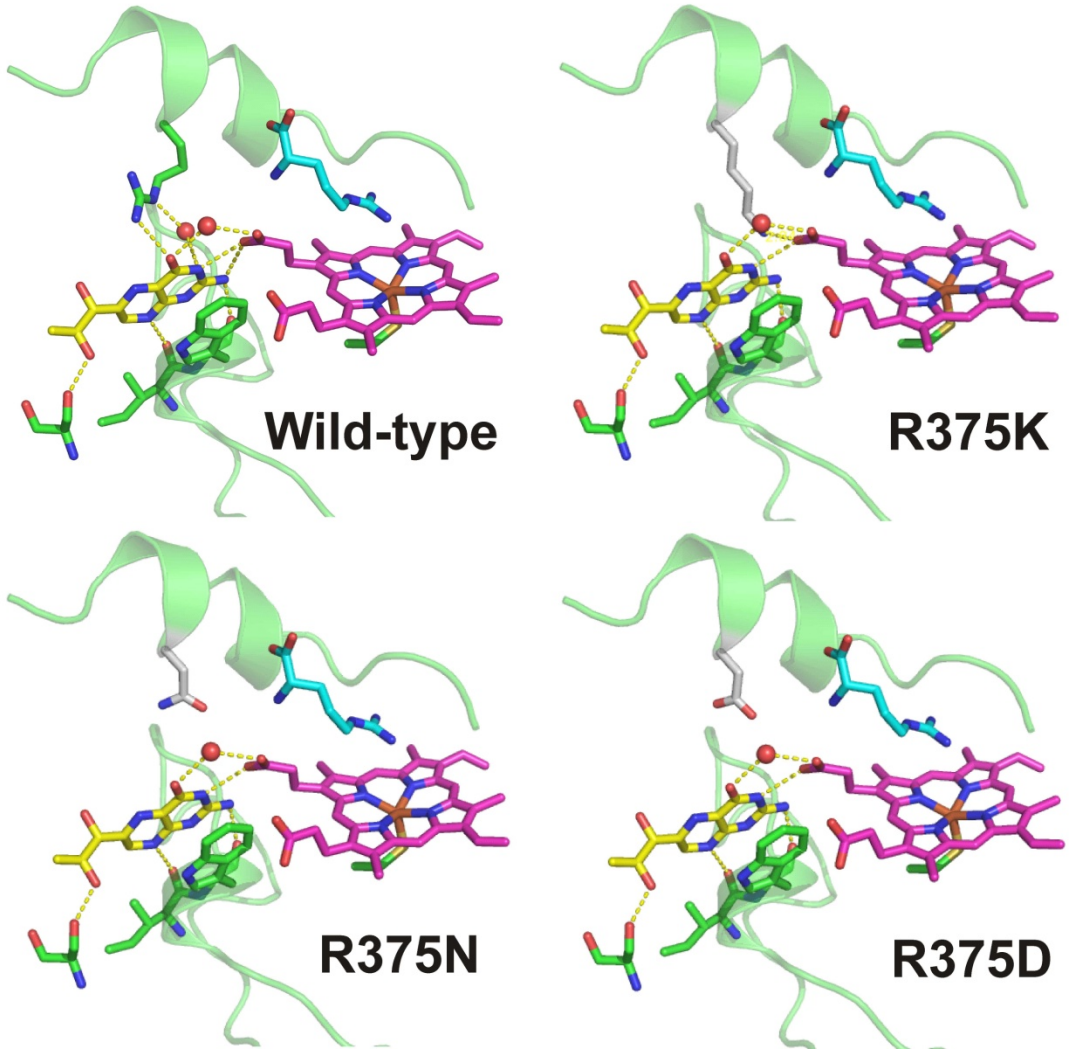

Fig. S1. Models for the H_4B environment in Arg375 mutants. Top left, wild-type structure; Top right, R375K mutant; bottom left, R375N, bottom right, R375D. Mutant structures indicate a possible orientation of the mutated side chain (white) in the absence of major structural changes relative to the wild-type structure. Only the side chain of R375K is long enough to establish direct interactions with the H_4B cofactor. Relevant iNOS residues are shown in green; H_4B (yellow), heme (pink) and the substrate L-Arg (blue) are shown as sticks. Two water molecules that mediate H-bonding interactions are shown as red spheres. The hydrogen bonding interactions are shown as yellow dashes. The figure was made using PyMOL (http://www.pymol.org/) with the crystal structure of the mouse iNOSoxy dimer (PDB entry 1NOD [12;79]).