

Supplementary Figure S1. Alignment of haem binding motifs 1 to 4 in the primary structures of NrfB and NrfH.

	TM Helix in NrfH	--1--	--2--
NrfH_Dvul	MSEEKS RNGP ARKL VLGGAT LGVVAL ATVA FG -- MKY TDQR -- PF CTSCHIM NPVG VTHK LSGH AN ----- IS CND CHAP HNL A KLPF KA IAGA P DVY		
NrfB_Ecol	MSVLR SLL TAGVL ASGLL WSLN G ITAT PAAQ ASDD RYEV T QQRNP DAA CLDCHK PDTE GM - HGK -- HAS V IN PNNK LPV T CTN CHG QP SP QH REG VKD VMRF NFP		
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	NrfB signal peptide	--1--	--2--
		--3--	--4--
NrfH_Dvul	MNTLGHPGDLI LAGMETKEV VNANC KACH TMTN VEAS MEA ----- KKYCTDCHR NVQH MRMKP I STREV ADE *		
NrfB_Ecol	----- MYKVGEQNSV CMSCHL PEQLQKA FWPH DVHV TKVAC ASCH -- SLHPQQDTM QTLSDKGRI KICVDCH SDQRTN PN FNPASV PLLKEQP *		
	* *		
	-----	--3--	--4--
			--5--

**Supplementary Figure S2.** Model of the NrfA-NrfB ( $\alpha_2\beta_2$ ) complex based on an alignment of NrfA and NrfB haems (red) with the haems of HAO oxidoreductase. The crystal structures of NrfA (PDB entry 1GU6) in green and NrfB (this study) in blue show that if a docking of the protein were to occur, movement of two NrfA surface  $\alpha$ -helices would be necessary to allow NrfB to associate.

