

	10	20	30	40	50	60
<i>P.a.BfrB</i>	MKGD	KVIQHLN	KNKILGN EL	IAINQYFLHS	RMWWDWGLKRL	GAHEYHESID EMKH HADKLI E
<i>A.vinelandii</i>	MKGD	KVIQHLN	KNKILGN EL	IAINQYFLHARM	YEDWGLEKLGK	HEYHESID EMKH HADKLIK
<i>E. coli</i>	MKGD	TKVINYL	NKLLGN EL	VAINQYFLHARM	FKNWGLKRLND	VEYHESID EMKH HADRYIE
<i>M.smegmatis</i>	MQGD	PDVLLKLL	NEQLT SE	LTAINQYFLH	SKMQDNWGFTE	LAEHTRAESFE EMR H A ETITD
<i>R.capsulatus</i>	MKGD	AKVIEFL	NAALRS EL	TAISQYWVH	FRLQEDWGLAK	MAKKSREESIE EMG HADKIIA
	70	80	90	100	110	120
<i>P.a.BfrB</i>	RILF	LEGLPNLQDL	GKLLIGENTQ	EMLQCDLNL EL	KATKDLREAI	VHCEQVHDYVSRDLL
<i>A.vinelandii</i>	RILF	LEGLPNLQEL	GKLLIGEHTK	EMLECDLKL EQ	AGLPDLKAAI	AYCESVGDYASRELL
<i>E. coli</i>	RILF	LEGLPNLQDL	GKLNIGEDV	EEMLRSDLAL EL	DGAKNLREAI	GYADSVHDYVSRDMM
<i>M.smegmatis</i>	RILLL	DGLPNYQRLF	SLRVGQTLRE	QFEADLAI EY	EVLERLKP	GIVLCREKQDATSARLL
<i>R.capsulatus</i>	RILF	LEGHPNLQKLD	PLRIGEGPRE	TLECDLAGE EH	DALKLYREAR	DYCAEVGDIVSKNIF
	130	140	150			
<i>P.a.BfrB</i>	KDILE SEEEH	IDYLETQLGLI	QKVGLENYLQ	SHMHEDD---		
<i>A.vinelandii</i>	EDILE SEEDH	IDWLETQLDL	IDKIGLENYLQ	SQMDE----		
<i>E. coli</i>	IEILRD EEGH	IDWLETEL	DLIQKMGLQNYL	QAQIREEG---		
<i>M.smegmatis</i>	EQILAD EETH	IDYLETQLQL	MDKLGDALYAA	QCVSPPGSA		
<i>R.capsulatus</i>	ESLITD EEGH	VDFLETQISL	YDRLGPGQF	FALLNAAPMDAAE		

Figure S1. Bacterioferritin sequences from different organisms aligned against *P. aeruginosa* BfrB (Pa BfrB): Residues involved in the ferroxidase center, as well as Met-52, which coordinates the heme axially, are highlighted. The sequences were aligned with the aid of ClustalW

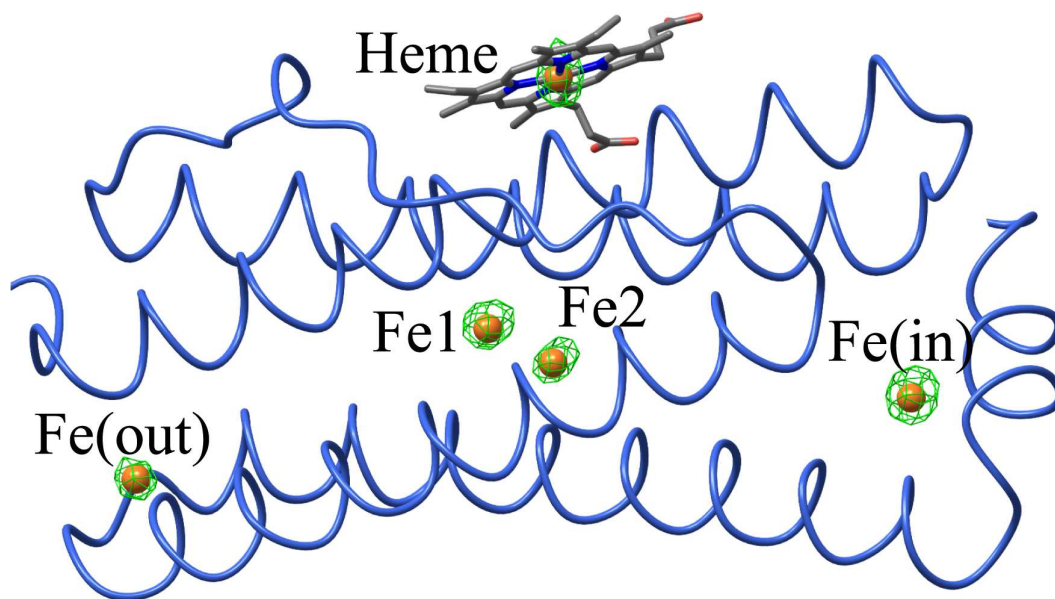


Figure S2. Single subunit of BfrB showing the anomalous difference map (green mesh) calculated from data collected at $\lambda = 1.6314 \text{ \AA}$ contoured at 6σ . Fe atoms are represented as gold spheres and the neighboring heme atoms are drawn as sticks.

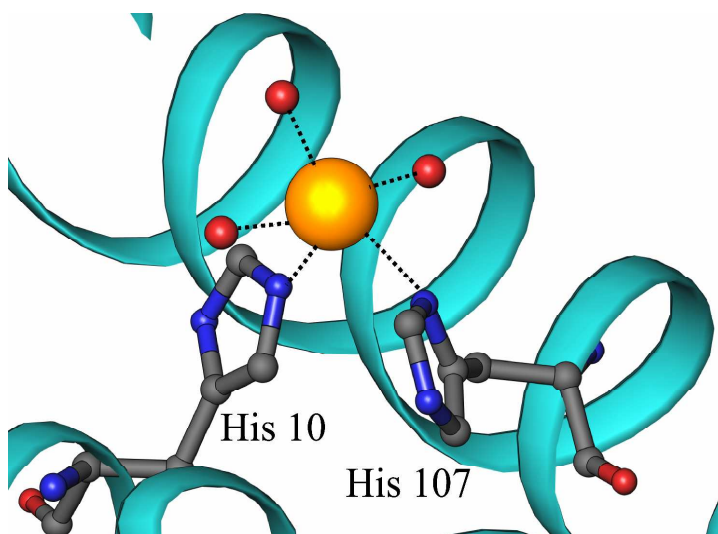
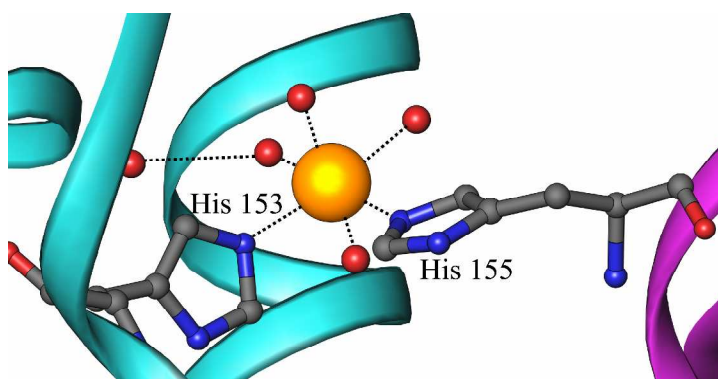


Figure S3. Non-bonded contacts between Fe ions and histidine residues. Fe ions and water molecules are represented as gold and red spheres, respectively. (A) Fe_{in} and His 153 from subunit J and His 155 from subunit E. (B) Fe_{out} and surface residues His 10 and His 107.