

Supporting Information with

**Redox state dependent complex formation  
between pseudoazurin and nitrite reductase**

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**Table S1:** The  $pK_a$  values obtained by fitting with equations 7 or 8 the chemical shift changes of PAZ backbone amides (in  $^{15}\text{N}$  or  $^1\text{H}$  dimension) affected during a pH titration between pH 8.0 - 4.0. Buffer: 20 mM potassium phosphate. T = 295 K.

Residue	( $^{15}\text{N}$ ) $pK_{a1}$	( $^{15}\text{N}$ ) $pK_{a2}$	( $^1\text{H}$ ) $pK_{a1}$	( $^1\text{H}$ ) $pK_{a2}$
<b>Glu 1</b>	5.0 ± 0.1	7.2 ± 0.1	4.7 ± 0.1	7.2 ± 0.1
<b>Glu 4</b>	5.0 ± 0.1	7.2 ± 0.1		
<b>Val 5</b>	5.4 ± 0.2	7.3 ± 0.1	4.3 ± 0.1	7.2 ± 0.1
<b>His 6</b>	-	7.3 ± 0.2	5.2 ± 0.1	7.5 ± 0.5
<b>Leu 8</b>	5.9 ± 0.1		4.7 ± 0.1	
<b>Lys 10</b>	4.7 ± 0.1		5.0 ± 0.1	
<b>Gly 11</b>	4.7 ± 0.1			
<b>Glu 13</b>	4.5 ± 0.1		4.7 ± 0.1	
<b>Val 17</b>	5.0 ± 0.1		5.0 ± 0.1	7.7 ± 0.2
<b>Glu19</b>	4.5 ± 0.1	7.3 ± 0.1	5.0 ± 0.1	7.7 ± 0.2
<b>Ala21</b>	4.4 ± 0.2	7.4 ± 0.2		
<b>Asn 26</b>	5.0 ± 0.1		4.7 ± 0.1	
<b>Asp 29</b>	4.4 ± 0.1		5.0 ± 0.1	
<b>Thr 30</b>	5.6 ± 0.1		5.0 ± 0.1	7.0 ± 0.1
<b>Ile 34</b>		7.6 ± 0.2		7.5 ± 0.2
<b>Val 36</b>	5.0 ± 0.1			
<b>Asp 37</b>	4.7 ± 0.2	7.3 ± 0.1	4.3 ± 0.1	7.5 ± 0.2
<b>Gly39</b>	4.7 ± 0.2	7.3 ± 0.1	4.4 ± 0.2	7.2 ± 0.1
<b>His 40</b>		7.4 ± 0.1		7.5 ± 0.1
<b>Lys 77</b>	5.0 ± 0.1	-	5.0 ± 0.1	-
<b>Cys 78</b>	5.0 ± 0.1			
<b>Thr 79</b>	5.0 ± 0.1	7.5 ± 0.3	5.0 ± 0.1	7.5 ± 0.1
<b>Tyr 82</b>	5.0 ± 0.1	-	4.7 ± 0.2	
<b>Ala 83</b>	4.7 ± 0.3	-	5.0 ± 0.1	-
<b>Met 84</b>	4.7 ± 0.1		5.0 ± 0.1	
<b>Met 86</b>	5.0 ± 0.1	7.8 ± 0.1	4.7 ± 0.1	8.4 ± 0.2
<b>Ala 88</b>	5.0 ± 0.1	7.7 ± 0.1	5.0 ± 0.1	7.6 ± 0.1