

**Table 1. Permeabilities of reconstituted proteoliposomes**

Permeability	Conditions	Liposomes	GlpF	AqpZ	GlpF + AqpZ
<b>Glycerol</b>					
$k_{gly}$ , s <sup>-1</sup>	Control at 5°C	0.019 ± 0.006	7.8 ± 0.7	0.011 ± 0.005	38 ± 1
	Control at 20°C	0.17 ± 0.02	18 ± 1	0.14 ± 0.02	54 ± 7
	HgCl <sub>2</sub> at 20°C*	0.11 ± 0.02	0.28 ± 0.01	0.14 ± 0.02	16 ± 1 <sup>†</sup>
$P_{gly}$ , cm/s at 5°C		6.2 × 10 <sup>-8</sup>	2.5 × 10 <sup>-5</sup>	3.6 × 10 <sup>-8</sup>	1.2 × 10 <sup>-4</sup>
$E_a$ , kcal/mol		27 ± 2	9.6 ± 1.5	25 ± 2	4.9 ± 1.5
<b>Water</b>					
$k_w$ , s <sup>-1</sup>	Control at 5°C	2.4 ± 0.2	23 ± 3	154 ± 30	
	Control at 20°C	13.5 ± 0.2	41 ± 1	158 ± 18	
	HgCl <sub>2</sub> at 20°C*	2.5 ± 0.2	4.8 ± 0.1 <sup>†</sup>	98 ± 6	
	HgCl <sub>2</sub> + DTT at 20°C*	ND	32 ± 5 <sup>†</sup>	ND	
$P_r$ , cm/s at 5°C		5.1 × 10 <sup>-4</sup>	4.9 × 10 <sup>-3</sup>	3.3 × 10 <sup>-2</sup>	
$E_a$ , kcal/mol		16	7	3	

\*Proteoliposomes were preincubated with 100 μM HgCl<sub>2</sub> for 30 min at 37°C. Reversal of HgCl<sub>2</sub> inhibition was achieved by incubation with 1 mM DTT at 37°C for 30 min. ND, not determined.

<sup>†</sup>This value corresponds to 30 μM HgCl<sub>2</sub>.