

TABLE 1. Measurements of cell envelope layers of *E. coli* B

Cell type and protocol	OM/om	Diameter (nm) of the following layers (previous model/new model):			
		IL/outer periplasmic-peptidoglycan gel	Periplasmic space/inner periplasmic gel	Cytoplasmic membrane/cytoplasmic membrane	Total envelope
<b>Whole cell</b>					
Osmium-Epon	8.3 ± 1.1 <sup>a</sup>	8.4 ± 1.1	4.5 ± 0.6	8.5 ± 1.2	29.7 ± 4.0
Glutaraldehyde-Epon	7.4 ± 0.7	7.4 ± 0.6	4.1 ± 0.9	7.8 ± 1.0	26.7 ± 3.4
Glutaraldehyde-HM20, room temperature	7.4 ± 0.7	7.6 ± 0.8	3.9 ± 0.6	8.3 ± 1.8	27.2 ± 3.7
Freeze-substitution	7.4 ± 0.5	9.1 ± 0.9	4.5 ± 0.8	7.7 ± 0.5	28.7 ± 1.0
Glutaraldehyde-HM20, low temperature	7.2 ± 1.1	7.6 ± 0.8	7.4 ± 0.7	7.9 ± 1.2	30.1 ± 4.1
Glutaraldehyde-HM20, low temperature <sup>b</sup>	6.7 ± 0.9	6.6 ± 0.9	7.7 ± 1.0	9.0 ± 1.2	30.0 ± 4.0
<b>Mickle envelopes</b>					
Osmium-Epon	7.9 ± 1.1				
Glutaraldehyde-Epon	7.1 ± 1.0	6.2 ± 0.8			
Glutaraldehyde-HM20, low temperature	7.3 ± 1.0	7.4 ± 1.0			
Glutaraldehyde-HM20, low temperature <sup>b</sup>	7.0 ± 0.9	6.4 ± 0.9			
Freeze-substitution	6.0 ± 0.4	6.5 ± 0.5			

<sup>a</sup> Standard deviation.<sup>b</sup> Unstained thin sections viewed by STEM.