

**Table 1. Glycan strand length and cross-linking of peptidoglycan from different species**

Organism (growth conditions), remarks	Mean length of glycan strands		Cross-linkage (% <sup>c</sup> )	Ref.
	DS units <sup>a</sup>	Method		
<b>Gram-negatives</b>				
<i>Escherichia coli</i> KN126 (LB medium, exponential growth)	25.8	Anh <sup>b</sup>	48.5	[20]
<i>E. coli</i> KN126 (LB medium, stationary)	17.8	Anh	60.6	[20]
<i>E. coli</i> KN126 (PB medium, 30 °C)	33.3	Anh	44.7	[20]
<i>E. coli</i> KN126 (PB medium, 42 °C)	37.9	Anh	44.6	[20]
<i>E. coli</i> W7, different growth rates	23–30	Anh	45–49	[63]
<i>E. coli</i> W7, newly made peptidoglycan	50–60	Anh	~40	[24]
<i>E. coli</i> EH3247	8.9 (70–75%)	GL <sup>d</sup>		[25]
	45.1 (25–30%)	Anh		
	21 (total)	GL/Anh		
<i>E. coli</i> P678-54, isolated minicells (cell poles)	23.5	Anh	54.8	[64]
<i>E. coli</i> P678-54, whole cells	27.8	Anh	52.4	[64]
<i>E. coli</i> MC4100 <i>lysA</i> , normal rod-shaped	31	Anh	47	[65]
<i>E. coli</i> MC4100 <i>lysA ftsA</i> , filamentous cells	30	Anh	46	[65]
<i>E. coli</i> MC4100 <i>lysA pbpB</i> , spherical cells	32	Anh	47	[65]
<i>E. coli</i> , different strains and growth conditions	33–52	Gal <sup>e</sup>		[22]
<i>E. coli</i> MC6RP1	22	Anh	30.8	[62]
<i>Acinetobacter acetoaceticus</i>	11	Anh	49.0	[62]
<i>Aeromonas</i> sp.	36	Anh	32.5	[62]
<i>Agrobacterium tumefaciens</i>	38	Anh	32.7	[62]
<i>Enterococcus cloacae</i> ATCC 13047	31	Anh	35.6	[62]
<i>Helicobacter pylori</i> , NCTC 11637, spiral cells (4 h of growth)	7.1	Anh	27	[37]
<i>H. pylori</i> NCTC 11637, round cells (stationary)	5.6	Anh	31	[37]
<i>H. pylori</i> 26695 (8 h of growth)	9.1	Anh	29.3	[36]
<i>H. pylori</i> 26695 (48 h of growth)	7.9	Anh	31.1	[36]
<i>Myxococcus xanthus</i>	9	Anh	66.3	[66]
<i>Proteus morganii</i>	53	Anh	36.1	[62]
<i>Pseudomonas aeruginosa</i>	16	Anh	34.6	[62]
<i>Pseudomonas putida</i>	29	Anh	25.2	[62]
<i>Thermus thermophilus</i> HB8	30	Gal	25	[67]
<i>Vibrio parahaemolyticus</i>	10	Anh	31.9	[62]
<i>Yersinia enterocolitica</i>	36	Anh	29.2	[62]
<b>Gram-positives</b>				
<i>Bacillus subtilis</i>	>500	AFM <sup>f</sup>		[16]
<i>B. subtilis</i> HR (growing)			56.4	[68]
<i>B. subtilis</i> HR (late stationary)			63.9	[68]
<i>Deinococcus radiodurans</i>	20	Anh	39.5	[69]
<i>Staphylococcus aureus</i> , different strains	~6 (85–90%)	GL	74–92	[41–43]
	>26 (10–15%)			

<sup>a</sup>DS: disaccharide. One DS unit has a length of approximately 1.03 nm.

<sup>b</sup>Anh: From the analysis of mucopeptide composition; calculated from the fraction of 1,6-anhydroMurNAc-containing mucopeptides (MurNAc ends).

<sup>c</sup>Percentage of peptides present in cross-links, from the analysis of mucopeptide composition; calculated as 100%–% monomeric mucopeptides.

<sup>d</sup>GL: HPLC separation and quantification of isolated glycan strands.

<sup>e</sup>Gal: quantification of GlcNAc ends by enzymatic attachment of radioactive D-Gal.

<sup>f</sup>AFM: atomic force microscopy.