

Table 4. Influence of plastics on the activity of peptides against *E. coli* ATCC 25922

Peptide	n ¹	GRAVY ²	Q ³	POLYSTYRENE			POLYPROPYLENE		
				MIC ⁴	MBC ⁵	PB ⁶	MIC	MBC	PB
P 3	9	-1.144	5	> 256	> 256	2	256	256	2
P 4	9	-1.100	4	32	32	4	32	64	4
P 11	13	-2.100	8	32	32	2	32	128	2
P 13	13	-1.962	8	128	128	2	32	256	2
P 17	12	-1.900	7	256	256	2	128	256	4
P 21	11	-1.664	6	64	64	2	32	64	1
P 25	12	-0.733	5	64	256	2	32	256	2
P 28	12	-0.733	5	> 256	> 256	1	> 256	> 256	2
P 34	10	-1.420	5	> 256	> 256	2	> 256	> 256	4
P 40	10	-0.650	4	64	128	2	32	64	1
P 43	11	-0.850	5	32	64	8	32	32	8
P 44	11	-0.909	5	128	128	2	128	128	1
P 46	10	-0.850	5	32	256	2	32	64	1
P 49	10	-0.610	5	32	32	2	32	32	1
P 50	10	-1.190	5	32	64	2	32	32	2
P 55	10	-1.070	4	128	128	4	128	256	2
PMB ⁷	10	-1.820	5	0.5	0.5	0.5	< 0.125	0.5	0.5

¹ Number of amino acid residues² GRAVY index: Grand average of hydropathicity (the more positive the score, the more hydrophobic the overall sequence)³ Q: net charge⁴ MIC: minimum inhibitory concentration in µg/mL determined by a microbroth-based assay in non-cation adjusted Mueller-Hinton medium⁵ MBC: minimum bactericidal concentration in µg/mL determined by plating aliquots of non-cloudy wells from the microbroth-based MIC assay⁶ PB: minimum bactericidal concentration in µg/mL determined by exposing a bacterial suspension to the peptide for 18 h in phosphate buffer 20 mM; pH= 7.0⁷ Diaminobutyric acid residues present in PMB were substituted for lysine residues to calculate the GRAVY index of the peptidic moiety of PMB.