In vitro and *in vivo* evaluation of BMAP-derived peptides for the treatment of cystic fibrosis-related pulmonary infections

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Supplementary materials

Figure S1

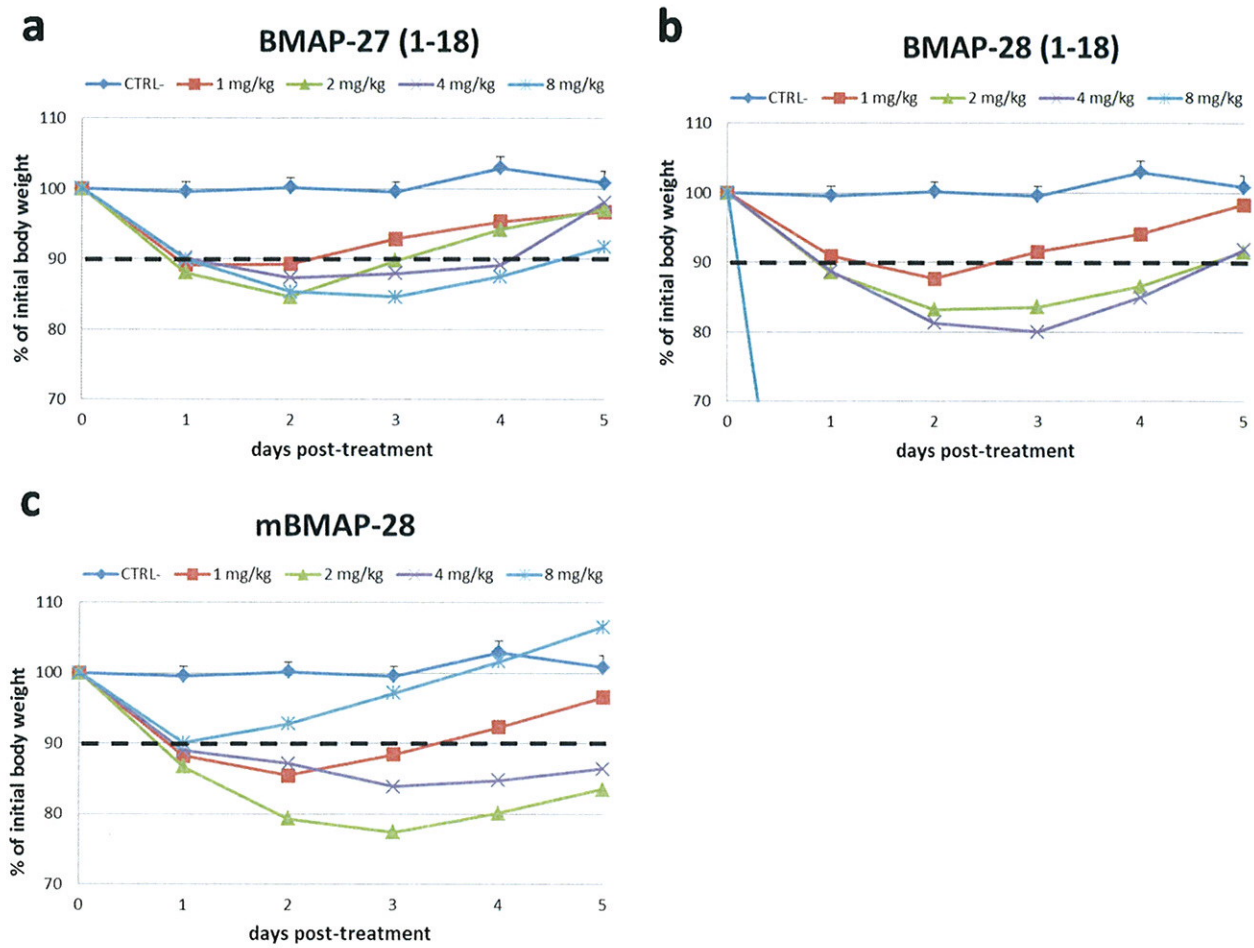

Fig. S1 C57BL/6NCrl weight monitoring following a single exposure to BMAP-27(1-18), BMAP-28(1-18) and mBMAP-28, each tested at different doses. On day 0, C57BL/6NCrl mice (n = 65; 5/group) were treated with different AMPs doses or vehicle alone (CTRL) and examined for 5 days. The dotted line shows a 10% weight loss with regard to mean body weight before infection. Results are expressed as mean + SD (n = 5/group).

Figure S2

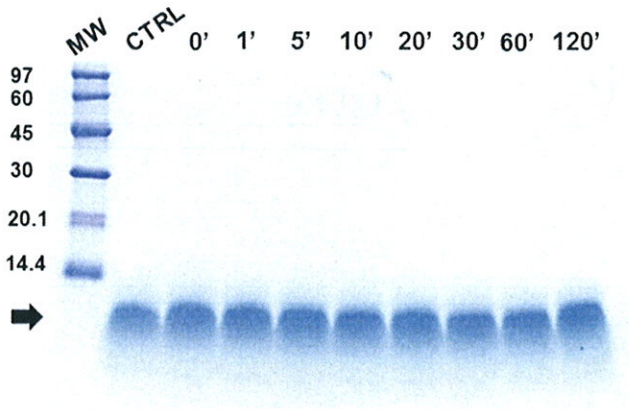

Fig.S2 Evaluation of the stability of BMAP-27(1-18) in the presence of sterile 0,9% NaCl. Samples were collected at indicated times of incubation at 37°C and analyzed by SDS-PAGE (gel 16%, tricine) following staining with Coomassie Blue. As controls, 2.4 μg of BMAP-27(1-18) (indicated as CTRL) were loaded, corresponding to the original peptide concentration at the beginning of the time-course. The arrow indicates the peptide bands.

Table S1. MIC values of the peptides used in this study against CF clinical isolates (see materials and methods).

	MIC (µg/ml)		
Strain	**BMAP-27(1-18)**	**BMAP28(1-18)**	**mBMAP-28**
Staphylococcus aureus 01	>32	>32	32
Staphylococcus aureus 02	>32	32	16
Staphylococcus aureus 03	>32	32	32
Staphylococcus aureus 04	32	16	32
Staphylococcus aureus 05	32	8-16	16
Staphylococcus aureus 07	32	16	8
Staphylococcus aureus 08	32	32	32
Staphylococcus aureus 09	32	16	16
Staphylococcus aureus 10	>32	>32	32
Staphylococcus aureus 11	16	16	16
Staphylococcus aureus 12	16	32	16
Staphylococcus aureus 13	16	8-16	16
Staphylococcus aureus 14	32	32	16
Staphylococcus aureus 15	>32	>32	>32
Staphylococcus aureus 16	>32	>32	32
Pseudomonas aeruginosa 03	8	8	4
Pseudomonas aeruginosa 05	4	2	4
Pseudomonas aeruginosa 07	4	4	2
Pseudomonas aeruginosa 08	8	2	4
Pseudomonas aeruginosa 09	16	4	4
Pseudomonas aeruginosa 10	>32	2	2
Pseudomonas aeruginosa 14	8	4	8
Pseudomonas aeruginosa 21	8	4	4
Pseudomonas aeruginosa 22	2	4	8
Pseudomonas aeruginosa 31	8	2	2
Pseudomonas aeruginosa 35	2-4	2	2
Pseudomonas aeruginosa 36	8	32	16
Pseudomonas aeruginosa PA01	8	8	4
Pseudomonas aeruginosa RP73	32	32	8
Stenotrophomonas maltophilia 103	4	1	1
Stenotrophomonas maltophilia 105	8	1	2
Stenotrophomonas maltophilia 106	>32	1	2
Stenotrophomonas maltophilia 110	4	2	8
Stenotrophomonas maltophilia 120	16	4	4
Stenotrophomonas maltophilia 122	>32	4	16
Stenotrophomonas maltophilia 123	16-32	2	4
Stenotrophomonas maltophilia 126	32	2	4
Stenotrophomonas maltophilia 130	8	1	2
Stenotrophomonas maltophilia 136	8	1	2
Stenotrophomonas maltophilia 139	8	1-2	2
Stenotrophomonas maltophilia 143	4	1	2
Stenotrophomonas maltophilia 144	4	2	2
Stenotrophomonas maltophilia 159	4	1	1
Stenotrophomonas maltophilia 192	4	1	2-4