

Selection and redesign for high selectivity of membrane-active antimicrobial peptides from a dedicated sequence/function database

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Supporting information

Table S1. Data set of 62 peptides of anuran origin analyzed using Mutator.

Figure S1. Analytical RP-HPLC of Dadapin peptides.

Figure S2. Analytical RP-HPLC of Odorranain peptides.

Table S1. Data set of 62 peptides of anuran origin analyzed using Mutator.

#	Peptide	DADP ID	Sequence
1	Dermaseptin-H4	SP_Q1EJP5	GLWSTIKNVGKEAAIAAGKAALGAL
2	Dermaseptin-H5	SP_2676	GLWSTIKNVGKEAAIAAGKAVLGSL
3	Amolopin-2f	SP_C5H0D7	FFPIVGKLLFGLSGLL
4	Andersonin-Y1	SP_2843	FLPKLFAKITKKNMAHIR
5	Amolopin-2e	SP_C5H0D6	FLPIAGKLLSGLSGLL
6	Gaegurin-6-RN	SP_C0ILG2	FIGPVLKIAAGILPTAICKIFKKC
7	Brevinin-1Bb	SP_P82834	FLPAIAGMAAKFLPKIFCAISKCC
8	Maximin H2	SP_B5L106	ILGPVLSMVGSAALGGLIKKI
9	Amolopin-2a	SP_A0SN45	FLPIVGKLLSGLSGLL
10	Grahamin-2	SP_P85070	GLLSGILGAGKHIVCGLSGLC
11	Grahamin-1	SP_P0C2A4	GLLSGILGAGKNIVCGLSGLC
12	Amolopin-2h	SP_C5H0D9	FFPIVGKLLFGLFGLL
13	Gaegurin-6-RN	SP_C0ILJ3	FLGPIIKIATGILPTAICKFLKKC
14	Brevinin-1VLc	SP_2591	FLPVIASVAAKVLPKVFCTITKKC
15	Brevinin-1BLa	SP_2603	FLPAIVGAAAKFLPKIFCAISKCC
16	Brevinin-1BLc	SP_2604	FLPIIAGIAAKFLPKIFCTISKCC
17	Amolopin-2g	SP_C5H0D8	FFPIVGKLLSGLSGLL
18	Esculentin-1-OA6	SP_2920	GLFSKFAGKGIKNFLNKGVKHIGKE
19	Temporin-ALh	SP_2678	FLPIVGKLLSGLSGLS
20	Histone 2A	SP_2965	TRSSRAGLQFPVGRVHRLLRK
21	Bombinin-like peptide 3	SP_P29004	GIGAAILSAGKSALKGLAKGLAEHF
22	Nigrocin-1-OW4	SP_2942	GILSGVLGMGKKIVCGLRGLC
23	Ranalexin	SP_P39084	FLGGLIKIVPAMICAVTKKC
24	Phylloseptin-2	SP_P84567	FLSLIPHAINAVSTLVHFF
25	Phylloseptin-2	SP_P84930	FLSLIPHIATGIAALAKHL
26	Dybowski-4	SP_2687	VWPLGLVICKALKIC
27	Brevinin-1-OR9	SP_2897	ILPFVAGVAAMEMEHVYCAASKCC
28	Temporin-RN	SP_C0ILK2	FFPLLFGALSSHLPKLF
29	Odorranain-HP	SP_A7YL71	GLLRASSVWGRKYYVDLAGCAKA
30	Preprotemporin-1Oa1	SP_A3KD26	FLPLLASLFSRLL
31	Brevinin-1CSa	SP_2658	FLPILAGLAAKIVPKLFLCLATKKC

32	Amolopin-1b	SP_A0SN42	FLPLAVSLAANFLPKLFCCKITKCC
33	Caerin 1.6	SP_2996	GLFSVLGAVAKHVLPVVPVIAEKL
34	Caerin-1.6	SP_P62547	GLFSVLGAVAKHVLPVVPVIAEK
35	Brevinin-1E	SP_P32412	FLPFLAGLAANFLPKIFCKITRKC
36	Maximin H1	SP_P83080	ILGPVISTIGGVLGGLLKNL
37	Brevinin-1E	SP_P32412	FLPFLAGLAANFLPKIFCKITRKC
38	Brevinin-1BYa	SP_P84111	FLPILASLAAKFGPKLFLVTKKC
39	Brevinin-1CHa	SP_2651	FLPIIAGVAAKVLPKLFCAITKCC
40	Brevinin-1CHb	SP_2652	FLPVIAGLAAKVLPKLFCAITKCC
41	Nigrocin-1-OW5	SP_2943	GILGNIVGMGKQVVCGLSGLC
42	Odorranain-W1	SP_A6MBS8	GLFGKSSVWGRKYYVDLAGCAKA
43	Nigrocin-1-OA3	SP_2935	GIFLKVLGVGKKVLCVSGLC
44	Brevinin-1-RAA10	SP_D2K8J2	FLPAVIRVAANVLPFAFCAISKCC
45	Brevinin-1-OR10	SP_2898	FLPAVLLVATHVLPVFPFAITRKC
46	Odorranain B1	SP_A6MBD6	AALKGCWTKSIPPKPCFGKR
47	Odorranain-H2	SP_A6MBN4	GIFGKILGVGKKVLCVSGVC
48	Lividin-7a	SP_C3RSZ8	GILSGILGVGKKVLCVSGLC
49	Nigrocin-1-OA2	SP_2934	GIFGKILGVGKKTLCELSGMC
50	Ascaphin-8	SP_P0CJ32	GFKDLLKGAALKVKTVLF
51	Brevinin-1Bd	SP_P82836	FLPAIAGVAAKFLPKIFCAISKCC
52	Brevinin-1Be	SP_P82837	FLPAIVGAAKFLPKIFCVISKCC
53	Brevinin-1HSa	SP_P0C8S7	FLPAVLRVAAKIVPTVFPFAISKCC
54	Brevinin-1PTa	SP_P0C8T1	FMGGLIKAATKIVPAAAYCAITKCC
55	Brevinin-1VLa	SP_2590	FLGAIAGVAAKFLPKVFCFITKCC
56	Brevinin-1Ya	SP_2605	FLPVIAGVAANFLPKLFCFAISKCC
57	Brevinin-1Yb	SP_2606	FLPIIAGAAKVVQKIFCAISKCC
58	Brevinin-1AUa	SP_2622	FLPILAGLAAKLVPKVFCFCSITKCC
59	Brevinin-1AUb	SP_2623	FLPILAGLAANILPKVFCFCSITKCC
60	Temporin-1Sa	SP_2689	FLSGIVGMLGKLF
61	Brevinin-1SPa	SP_2692	FFPIIAGMAAKLIPSLFCCKITKCC
62	Brevinin-1SPd	SP_2694	FFPIIAGMAAKVICAITKCC

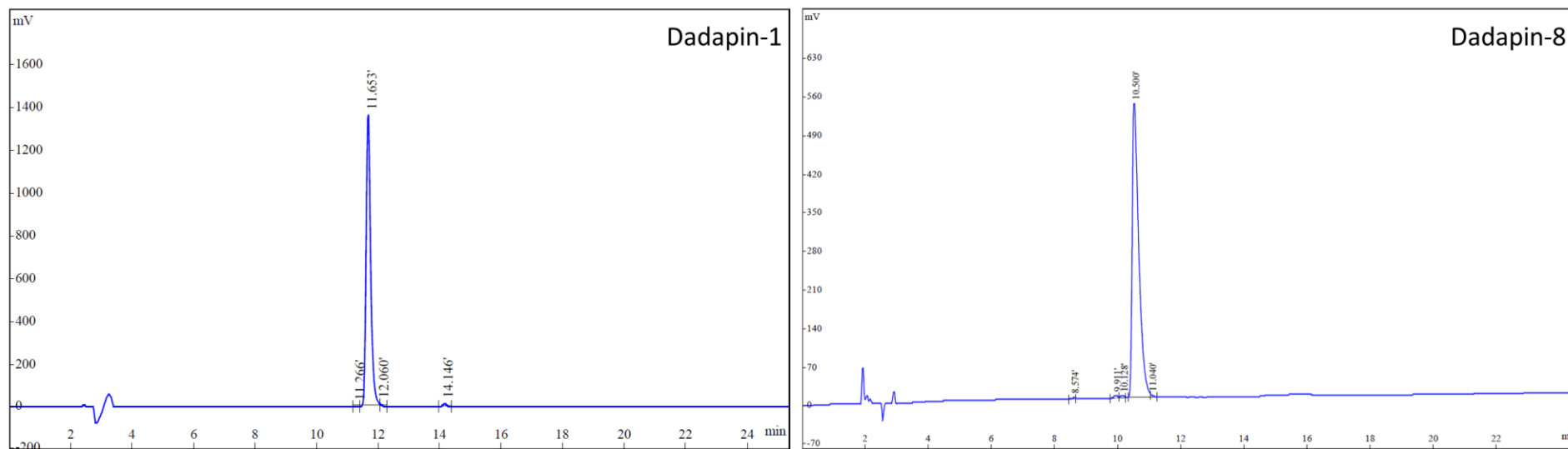


Figure S1. Analytical column (C18, 5 μm , 110 \AA , 4.6 x 250 mm) was used with 20-50 % acetonitrile/0.1% TFA gradient in 25 min with flow of 1.0 mL/min.

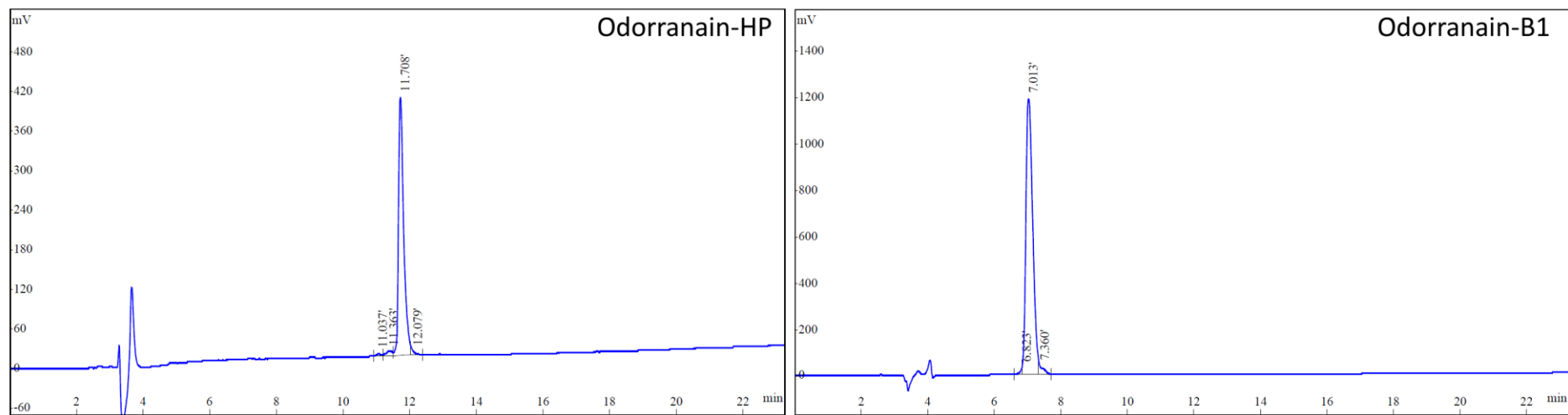


Figure S2. Analytical column (C18, 5 μm , 110 \AA , 4.6 x 250 mm) was used with 10-70 % acetonitrile/0.1% TFA gradient in 25 min with flow of 1.0 mL/min.