

**Table S1. Detailed characterization of tested AMPs.** *M.c.* were grown to an Optical Density (OD) 600nm of 0.6 in Brain Heart Infusion (BHI) Medium. Upon dilution to OD<sub>600nm</sub>= 0.01, *M.c.* were incubated with declining amounts of indicated AMPs (25  $\mu$ M to 0.048  $\mu$ M at halving intervals) at 37°C with 5% CO<sub>2</sub>. OD<sub>600nm</sub> was measured at 30 min intervals to establish the minimal inhibitory concentration (MIC). pI = isoelectric point, MW = molecular weight in kiloDalton.

MIC	AMP name	AMP class	Organism	Amino Acid Sequence	pI	MW (kDa)	Purity (%)	Retention time [min]	modification
0.195 $\mu$ M	Cecropin A	$\alpha$ -helical	<i>Hyalophora cecropia</i>	KWKLFKKIEKVGQNIRDGIIKAGPAVAVVGGATQIAK	10.75	4.00	91.06	7.30	n-term. amidation
0.39 $\mu$ M	Sarcotoxin IA	$\alpha$ -helical	<i>Sarcophaga peregrina</i>	GWLKKIGKKIERVGGQHTRDATIQGLGIAQQAANVAATAR	11.07	4.16	91.37	9.37	n-term. amidation
1.56 $\mu$ M	Cecropin A	$\alpha$ -helical	<i>Aedes aegypti</i>	GGLKKLGKLEGAGKRVFNAAEKALPVVAGAKALRK	10.79	3.67	90.38	11.76	none
>25 $\mu$ M	Ceratotoxin		<i>Ceratitis capitata</i>	SIGSAFKKALPVAKKIGKAALPIAKAALP	10.70	2.89	93.60	9.38	none
~ 25 $\mu$ M	Stomoxyn	$\alpha$ -helical	<i>Stomoxys calcitrans</i>	RGFRKHFNKLKVKVHTISETAHVAKDTAVIAGSGAAVVAAT	11.26	4.40	95.34	10.08	n-term. amidation
~ 25 $\mu$ M	Spinigerin	linear	<i>Pseudacanthotermes spiniger</i>	HVDKKVADKVLLLKQLRIMRLRL	11.07	3.00	96.23	12.45	none
>25 $\mu$ M	Apidaecin Ia	proline-rich	<i>Apis mellifera</i>	GNNRPVYIPQPRPPHPRI	11.71	2.11	92.98	16.91	none
>25 $\mu$ M	Apidaecin	proline-rich	<i>Bombus pascuorum</i>	GNNRPVYIPPPRPPHRL	11.71	2.00	92.03	16.36	none
>25 $\mu$ M	Formaecin-1	proline-rich	<i>Myrmecia gulosa</i>	GRPNPVNNKPTPHRL	12.01	1.80	93.53	13.93	none
>25 $\mu$ M	Drosocin	proline-rich	<i>Drosophila melanogaster</i>	GKPRPYSRPTSHRPIRV	12.01	2.20	92.86	11.65	none
>25 $\mu$ M	Pyrrhocorin	proline-rich	<i>Pyrrhocoris apterus</i>	VDKGSYLPRPTPPRPIYNRN	10.27	2.34	93.17	11.38	none
>25 $\mu$ M	Metalnikowin-1	proline-rich	<i>Palomena prasina</i>	VDKPDYRPRPPNPM	9.98	1.84	92.85	13.36	none
>25 $\mu$ M	Metalnikowin-2A	proline-rich	<i>Palomena prasina</i>	VDKPDYRPRPWPRPN	9.98	1.84	92.39	10.85	none
>25 $\mu$ M	Lebocin-1	proline-rich	<i>Bombyx mori</i>	DLRFLYPRGKLPVPTPPPFNPKPIYIDMGNRY	9.82	3.77	92.58	12.32	none
>25 $\mu$ M	Abaecin	proline-rich	<i>Bombus pascuorum</i>	FVPYNPPRPGQSKPFSFGHGFNPKIQWPYPLPNPGH	10.00	4.39	90.07	12.03	none
>25 $\mu$ M	Metchnikowin-1	proline-rich	<i>Drosophila melanogaster</i>	HRHQGPFDTRPSPFNPNQPRPGIY	10.74	3.03	99.06	11.50	none
>25 $\mu$ M	Metchnikowin-2	proline-rich	<i>Drosophila melanogaster</i>	HRRQGPFDTRPSPFNPNQPRPGIY	11.54	3.04	97.16	11.46	none
12.5 $\mu$ M	Defensin 1	disulfide stabilized	<i>Tribolium castaneum</i>	VTCDLLSAEAKGVKNHAACAAHCLLKRKRGYCNKRRCVCRN	9.7	4.83	90.53	18.41	none
~ 25 $\mu$ M	Cecropin-like	$\alpha$ -helical	<i>Lucilia sericata</i>	HHLFGKVGREIERSAHKVGHKLEHVRHEVSKTAKKVDKVVGHK TAKKVAAAGAIAGVVAAA	10.35	6.66	90.28	12.01	none
0.195 $\mu$ M	Cecropin	$\alpha$ -helical	<i>Galleria mellonella</i>	KWKIFKKIEKAGRNIRDGIIKAGPAVSVVGEAATYKGTG	10.21	4.21	93.61	12.33	n-term. amidation
0.37 $\mu$ M	Cecropin (Sarcotoxin 1C)	$\alpha$ -helical	<i>Lucilia sericata</i>	GWLKKIGKKIERVGGQHTRDATIQTIGVAQQAANVAATLKG	10.56	4.26	94.31	10.83	n-term. amidation
12.5 $\mu$ M	Stomoxyn	$\alpha$ -helical	<i>Lucilia sericata</i>	GFRKRFNKLKVKVHTIKETANVSKDVAIVAGSGVAVGAAMG	10.73	4.38	90.37	13.35	n-term. amidation n-term. amidation
1.56 $\mu$ M	Cecropin (Sarcotoxin)	$\alpha$ -helical	<i>Eristalis tenax</i>	GFLKKIGKKLEGAVQRTDRDATIQTIAVAQAAANVAATAKQ	10.56	4.14	90.80	9.76	none