

Table S1. Antimicrobial peptides with trypanocidal activity against *T. brucei* and *T. cruzi*

Target organism	Peptide	Origin	Structure	Sequence	Mechanism of action	Reference
<i>T. brucei</i>	Attacin	Tsetse fly <i>Glossina</i> (Fat body, proventriculus and haemolymph)	β -sheet	NANVVGGVFAAGNTDGGPATRGAFLAANKDGHGL SLQHSKTDNFGSSLTSSAHAHLFNDKTHKLDANAFH SRTHLDNGFKFDRVGGGLRYDHTVGHGASLTASRIP QLDMNTLGLTGKANLWSSPNRATTDLTGGVSKHF GGPFDGQTNKQIGLGLNSRF	Disruption of the plasma membrane	[16,156,215,216]
	Defensin	Tsetse fly <i>Glossina</i> (Fat body, proventriculus and haemolymph)	Mixed (α -helix/ β -sheet)	VTGELKRDKRVTCTNIGEWVCVAHCNSKSKKSGYCSR GVCYCTN	Disruption of the plasma membrane	[156,157,216]
	Diptericin	Tsetse fly <i>Glossina</i> (Midgut, fat body and proventriculus)	β -sheet	PQSPPAQIKDPKIYASGGGSPKDGYNVNVVDVRKNVWV SQNGRHSIDATGGYSQHLGGPYGNSRPDFRGGASYTYRF	Disruption of the plasma membrane	[16,157,216]
	Cecropin	Tsetse fly <i>Glossina</i> (haemolymph)	α -helix	GWLKKIGKKIERVQNTDRTATVKGLEVAQQAANVAAT- VRG	Disruption of the plasma membrane	[16,156,216–218]
	Stomoxyn	<i>Stomoxys calcitrans</i> midgut	α -helix	ARGFRKHFNKLVKKVKHTISETAHVAKDTAVIAG- SGAAVVAATG	Disruption of the plasma membrane	[16,158,216]
	β -defensin-1	Human epithelium	Mixed (α -helix/ β -sheet)	GLGHRSDHYNCVSSGGQCLYSACPIFTKIQGTCYR- GKAKCCK	Disruption of the plasma membrane	[216,219,220]
	β -defensin-2	Human epithelium, keratinocytes		GIGDPVTCLKSGACHPVFCPRRYKQIGTCGLPGTKCCKKP		[216,220,221]
	Cryptdin-4 (α -defensin)	Mouse paneth cells	β -sheet	LRGLLCYRKGHCKRGEEVRGTCGIRFLYCCPRR	Disruption of the plasma membrane	[216,218]

	LL-37	Human neutrophils	α -helix	LLGDFFRKSKEKKIVQRIKDFLRNLVPRTES	Disruption of the plasma membrane	[16,216,22 2–224]
	SMAP-29	Ovine myeloids	α -helix	RGLRRLGRKIAHGVKKYGPTVLRIRIAG	Disruption of the plasma membrane	[16,216,2 25,226]
	OaBAC-5-mini	Ovine myeloids	α -helix	RFRPPIRRPPIRPPFRPPFRPPVR	Disruption of the plasma membrane	[16,155,22 5]
	BMAP-27	Bovine neutrophils	α -helix	GRFKRFRKKFKKLFLKLSPIPLHLG	Disruption of the plasma membrane	[160,216,2 27]
	Indolicidin	Bovine neutrophils	Loop	ILPWKWPWWPWRRG	Disruption of the plasma membrane	[216,222,2 28]
	BAC-CN	Bovine neutrophils	γ -turn	RLCRIVVIRVCR	Disruption of the plasma membrane	[16,155,22 9]
	VIP	Human neurons (Myenteric and sub- mucosal) and nerve terminals in the GI tract	α -helix	HSDAVFTDNYTRLRKQMAVKKYLSILN	Disruption of the plasma membrane Alteration intracellular trafficking Disturbance of glycosomes and mito- chondria	[154,216,2 30]
	Amphotycin	<i>Streptomyces canus</i>	Macrocylic ring	FA-DMDDGDG-Dab-VP-Da-Pip	Inhibits the biosynthesis of the glyco- lipid precursor of GPI	[166,231,2 32]
	Leucinoastatin A	<i>Paecilomyces spp.</i>	α -helix	MHA-MeP-Dec-HyL-Aib-Aib-L-L-Aib- β A-N(CH ₃)	Ionophore Disruption of the plasma membrane	[166,233]
	Leucinoastatin B			MHA-MeP-Dec-HyL-Aib-Aib-L-L-Aib- β A-NH(CH ₃) ₂		
	Alamethicin	<i>Paecilomyces</i> spp.	α -helix	Ac-Aib-P-Aib-A-Aib-A-Q-Aib-V-Aib-GL-Aib-PV-Aib-Aib-E- Q-Phol	Ionophore Disruption of the plasma membrane	[167,174,2 34]

	AS-48	<i>Enterococcus faecalis</i>	α -helix	MVKENKFSKIFILMALSFLGLALFSASLQFLPIAHMAKFGI PAAVAGTVLNVVEAGGWVTIVSTAVGSGLSLLAAAGRE SIKAYLKKEIKKKGKRAVIAW	Formation of multilamellar vesicles and myelin-like structures Alteration of the nuclear envelope	[169,216,235]
	Mellitin	<i>Apis mellifera</i> (Venom glands)	α -helix	GIGAVLKVLTTGLPALISWIKRKRQQ	Alteration of Ca ²⁺ homeostasis Disturbance of mitochondria Disorganizing kinetoplast DNA Allteration of metabolism	[16,176,178,216,236]
	SHP-1	Synthetic	α -helix	SDLGAVISLLLWGRQLFA	Rigidity of the plasma membrane Loss of cell motility	[182]
	TOP-10	Synthetic	α -helix	AGYLLGKINLKALAALAKKIL	Interferes with cellular processes (such as enzymatic activities and nucleic acid synthesis)	[180,183]
<i>T. cruzi</i>	Trialysin	<i>Triatoma infestans</i> (Salivary glands)	Mixed (α -helix/ β -sheet)	KIKPGKVLDFGKIVGKVLKQLKKVSAVAVAMKKGA ALLKMGVKISPLKCEEKTCSCVIFKITENSFCTIRF MKNIATYLVVAGEINRKSKEEKLKLGNMPCVNVE- FIGKVCMKGIEGHAKSSSGQANVNFCLGLVAEKFGV GAKLCGIYANKKVRVKISPQLFPGATSLDGDIVKLDDN GEDATTLDDVDEVEID	Disruption of the plasma membrane	[20,216]
	Def1.3	<i>Triatoma (Meccus) pallidipennis</i> (Salivary glands)	Mixed (α -helix β -sheet)	RATCDLLSFESKWFTPNHAACAAHCILLGNRRGGH CVGTLCHCRK	Disruption of the plasma membrane	[22,216]
	Cecropin A	<i>Hyalophora cecropia</i>	α -helix	KWKLFKKIEKVGQNIRDGIIKAGPAVAVVGQATQIAK	Disruption of the plasma membrane	[186,190,216]
	Def- α -1	Human neutrophils	Mixed (α -helix β -sheet)	DIPEVVVSLAWDESLAPKHPGSRKNMACY- CRIPACIAGERRYGTCTYQGRLW	Disruption of the plasma membrane Cytoplasmic vacuolization Induction of nuclear and mitochondrial DNA fragmentation Breakage of the flagellar membrane	[195,196,216,237]

	VIP	Human (Myenteric and sub-mucosal neurons and nerve terminals in the GI tract)	α -helix	HSDAVFTDNYTRLRKQMAVKKYLSILN	Disruption of the plasma membrane	[104,216]
	Mellitin	<i>Apis mellifera</i> (Venom gland)	α -helix	GIGAVLKVLTTGLPALISWIKRKRQQ	Disruption of the plasma membrane Kinetoplast and mitochondrial deterioration Alterations of the Ca ²⁺ homeostasis Activation of different cell death pathways	[177,202]
	Polybia-CP	<i>Polybia paulista</i> (Venom gland)	α -helix	ILGTILGLLKSL	Induction of ROS Mitochondrial dysfunction Apoptosis-like cell death	[201,238]
	MP			IDWLKLGKVMMDVL	Induction of ROS Mitochondrial dysfunction Inhibition of the GAPDH enzyme	[208,216]
	BatxC	<i>Bothrops atrox</i> (Venom gland)	α -helix	KRFKKFFKKLKNSVKKRVKKFFRKPRVIGVTFPF	Disruption of the plasma membrane Production of ROS	[203,216]
	Ctn	<i>C. durissus terrificus</i> (Venom gland)	α -helix	KRFKKFFKKVKKSVKKRLKKIFKKPMVIGVTIPF	Mitochondrial dysfunction	[204,216]
	DS 01	<i>Phyllomedusa nordseltina</i> (Skin gland)	α -heli	GLWSTIKNVGKEAAIAAGKAALGAL	Disruption of the cell membrane	[105,106]
	DS 04			GLWSTIKQKGKEAAIAAKAAGKAALNAASEAL	Inhibition of synthesis of proteins,	
	Phyl 7			FLSLIPHAINAVSAIAKHF	DNA and RNA	
	Phyl 8			FLSLIPTAINAVSALAKHF		
	Figainin 1	<i>Boana raniceps</i> (Skin gland)	α -helix	FIGTLIPLALGALTCLFK	Disruption of the cell membrane	[211,216]
	Figainin 2			FLGAILKIGHALAKTVLPMVTNAFKPKQ	Inhibition of synthesis of proteins, DNA and RNA	

	Tach	<i>Tachypleus tridentatus</i> (Hemocytes)	β -sheet	KWCFRVCYRGICYRRC	Disruption of the plasma membrane	[185,216]
	Hemocyanin	<i>Penaeus monodon</i> (Hemolymph)	Mixed (α -helix/ β -sheet)	LVVAVTGDGAADA AVDGLHENTEF- NHYGSHGKYPDNRP HGYPLDRKVP	Disruption of the plasma membrane	[103,216]
	Tempz-1	Synthetic	α -helix	FLPLWLWLWRKLK	Chromatin condensation Mitochondrial cristae disorder Kinetoplast disorganization Increase in the number and degeneration of reservosomes	[17]
	DC 1	Synthetic	α -helix	FALALKALKKALKKLKKALKKAL	Disruption of the plasma membrane	[184]
	DC 2			FAKKLAKKLKKLAKKLAKLALAL		
	DC 3			FARRLARRLRRLARRLARLALAL		

GI: Gastrointestinal, FA: Fatty acid, Dabe: D-eryr/zro-cr,P-diaminobutyric acid, D-Pip: D-pipecolic, MHA: 4-methyl-2-hexenoic acid, MeP: 4-methylprolin, AHMO: 2-amino-6-hydroxy-4-methyl-8-oxodecanoic acid, HyL: threo- β -hydroxyleucine, Aib: 2-aminoisobutyric, β -A: β -alanine, DMPD: N, N-dimethylpropane1,2-diamine, AC: acetyl, Phol: L-phenylalaninol