

Table S2. tBLASTn summary of neuropeptides and regulatory peptide hormones

Peptide class	Query sequences		tBLASTn results (GenBank WGS accessions)*		
	Name	UniProtKB/ GenBank ID	<i>A.cephalotes</i>	<i>C.floridanus</i>	<i>H.saltator</i>
Neuropeptides/GPCR ligands					
	Adipokinetic hormone (= gonadotropin-releasing hormone) (<i>Drosophila melanogaster</i>)	sp P61855			
	Adipokinetic prohormone type 2 (<i>Schistocerca nitens</i>)	sp P35807			
	Adipokinetic hormone 1 (<i>Tribolium castaneum</i>)	tr A3RE76			
	Adipokinetic hormone 2 (<i>T.castaneum</i>)	tr D6WNV7			
	Allatostatin (<i>Acromyrmex echinator</i>) ⁺	tr F4X8T3	gb ADTU01011027.1	gb AEAB01013854.1	gb AEAC01017332.1
	Allatostatins (<i>Apis mellifera</i>) ⁺	sp P85797	gb ADTU01011027.1	gb AEAB01013854.1	gb AEAC01017332.1
	Allatotropin (<i>T.castaneum</i>)	tr D6WWW4			
	Arginine-vasopressin-like-propeptide (<i>Nasonia vitripennis</i>) ⁺	XP001606547.1	gb ADTU01000445.1	gb AEAB01028362.1	gb AEAC01019310.1
	Arginine-vasopressin-like-propeptide (<i>T.castaneum</i>) ⁺	tr A3RE83	gb ADTU01000445.1	gb AEAB01028362.1	gb AEAC01019310.1
	Cardioactive peptide (<i>D.melanogaster</i>)	sp Q9VCW0			
	Cardioactive peptide (<i>M.sexata</i>)	sp Q8WRC7			
	Cardio acceleratory peptide 2b (<i>D.melanogaster</i>)	sp Q9NIP6			
	(Pro-)Corazonin (<i>Camponotus floridanus</i>) [§]	tr E2ARW3	gb ADTU01018055.1	not applicable [#]	gb AEAC01003435.1
	(Pro-)Corazonin (<i>Harpegnathos saltator</i>) [§]	tr E2B7L4	gb ADTU01018055.1	gb AEAB01023843.1	n.a.
	(Pro-)Corazonin (<i>A.mellifera</i>)	sp Q5DW47	gb ADTU01018055.1	gb AEAB01023843.1	gb AEAC01003435.1
	(Pro-)Corazonin (<i>D.melanogaster</i>)	sp Q26377	gb ADTU01018055.1		gb AEAC01003435.1
	Ecdysis triggering hormone preprotein (<i>A.mellifera</i>)	tr B6F2B8	gb ADTU01012083.1	gb AEAB01024202.1	gb AEAC01018952.1
	Ecdysis triggering hormone (<i>D.melanogaster</i>)	tr Q9W103	gb ADTU01012083.1		gb AEAC01018952.1
	Ecdysis triggering hormone (<i>T.castaneum</i>)	tr D6WRE3			gb AEAC01018952.1
	FMRFamide-related neuropeptides (<i>C.floridanus</i>) [§]	tr E2A009		gb AEAB01004040.1	
	FMRFamide (<i>A.mellifera</i>)	tr F8J1L0	gb ADTU01002885.1	gb AEAB01003438.1	gb AEAC01013831.1
	FMRFamide-related peptides (<i>Bombyx mori</i>)	sp Q1MX22			
	FMRFamide-related peptides (<i>D.melanogaster</i>)	sp P10552			
	FMRFamide-related (<i>T.castaneum</i>)	tr D2A1T0			
	Myosuppressin (<i>A.mellifera</i>)	sp P85527	gb ADTU01018774.1	gb AEAB01006496.1	gb AEAC01020994.1
	(Dro-)Myosuppressin (<i>D.melanogaster</i>)	sp P61849	gb ADTU01018774.1	gb AEAB01006496.1	gb AEAC01020994.1
	Myosuppressin (<i>T.castaneum</i>)	tr D7EIL9			
	Neuropeptide F (<i>D.melanogaster</i>)	sp Q9VET0			
	Neuropeptide F (<i>Locusta migratoria</i>)	sp P86442			

Neuropeptide Y-like (<i>A.mellifera</i>) ⁺	NP001161192.1	gb ADTU01008737.1	gb AEAB01013583.1	gb AEAC01022580.1
Orcokinin peptides (<i>C.floridanus</i>) [§]	tr E1ZVK3	gb ADTU01022510.1	n.a.	gb AEAC01016540.1
Orcokinin peptides (<i>H.saltator</i>) [§]	tr E2BU65	gb ADTU01022510.1	gb AEAB01000665.1	n.a.
Orcokinin peptides (<i>A.mellifera</i>)	sp P85832	gb ADTU01022510.1	gb AEAB01000665.1	gb AEAC01016540.1
PBAN (=pheromone biosynthesis-activating)-type neuropeptide (<i>H.saltator</i>) [§]	tr E2B2R9	gb ADTU01002850.1	gb AEAB01014705.1	n.a.
PBAN-type neuropeptide (<i>A.mellifera</i>)	sp A8CL69	gb ADTU01002850.1	gb AEAB01014705.1	gb AEAC01000416.1
		gb ADTU01002851.1		
Protein pigment dispersing factor (PDF) (<i>D.melanogaster</i>)	sp O96690	gb ADTU01028995.1	gb AEAB01027821.1	gb AEAC01018247.1
Pyrokinin (<i>T.castaneum</i>)	tr D6W7C9		gb AEAB01014705.1	gb AEAC01000416.1
Short neuropeptide F (<i>D.melanogaster</i>)	sp Q9VIQ0		gb AEAB01017307.1	gb AEAC01008675.1
Short neuropeptide F (<i>T.castaneum</i>)	tr D6X455	gb ADTU01008389.1	gb AEAB01017307.1	gb AEAC01008675.1
Pro-Sialokinin (<i>Aedes aegypti</i>)	sp P42634			
(Dro-)Sulfakinins (<i>D.melanogaster</i>)	sp P09040	gb ADTU01031336.1	gb AEAB01014680.1	
Sulfakinin (<i>T.castaneum</i>)	tr D6WP08	gb ADTU01031336.1	gb AEAB01014680.1	gb AEAC01011304.1
Tachykinin (<i>A.echinator</i>)	tr F4WJJ0	gb ADTU01000331.1	gb AEAB01016992.1	no hits, see footnote ^{&}
Tachykinins (<i>A.mellifera</i>)	sp Q868G6	gb ADTU01000331.1	gb AEAB01016992.1	no hits, see footnote ^{&}
Other neuropeptides				
Hypothetical protein LOC409634 (<i>A.mellifera</i>)	XP393134.4	gb ADTU01027978.1	gb AEAB01020462.1	gb AEAC01010737.1
Hypertrehalosaemic prohormone (<i>C.floridanus</i>)	tr E2AMJ9	gb ADTU01004554.1	n.a.	gb AEAC01021474.1
Nogo-B receptor-like peptide (<i>A.mellifera</i>)	XP001120453.2	gb ADTU01027831.1	gb AEAB01010219.1	gb AEAC01010598.1
Proctolin (<i>D.melanogaster</i>)	tr Q9VLV9			
Protein hugin (<i>D.melanogaster</i>)	sp Q9VG55			
Osmoregulatory peptides/GPCR ligands				
Diuretic hormone (<i>Acheta domesticus</i>)	sp P23834			
Putative diuretic hormone-I (<i>A.mellifera</i>)	tr Q5F302	gb ADTU01020665.1	gb AEAB01008798.1	gb AEAC01003516.1
Diuretic hormone class 2 (<i>A.mellifera</i>)	sp P85830	gb ADTU01016305.1	gb AEAB01029697.1	gb AEAC01024560.1
Putative diuretic hormone-I (<i>A.mellifera</i>)	tr Q5F302	gb ADTU01020665.1	gb AEAB01008798.1	gb AEAC01003516.1
Diuretic-hormone-class2 (<i>D.melanogaster</i>)	sp Q9VLK4	gb ADTU01016305.1	gb AEAB01029697.1	gb AEAC01024560.1
Diuretic hormone, isoform A (<i>D.melanogaster</i>)	tr Q9VH98	gb ADTU01020665.1	gb AEAB01008798.1	gb AEAC01003516.1
Diuretic hormone, isoform B (<i>D.melanogaster</i>)	tr A8JQW2	gb ADTU01020665.1	gb AEAB01008798.1	gb AEAC01003516.1
Diuretic hormone (<i>L.migratoria</i>)	sp P23465			
Diuretic hormone 37 like protein (<i>T.castaneum</i>)	tr D7EJD2			
Diuretic hormone 31 like protein (<i>T.castaneum</i>)	tr D6WC08	gb ADTU01016305.1	gb AEAB01029697.1	gb AEAC01024560.1
Diuretic hormone 47 (<i>T.castaneum</i>)	tr D7EJD3	gb ADTU01020665.1	gb AEAB01008798.1	gb AEAC01003516.1
CHH-like-protein (<i>B.mori</i>)	sp Q9NL55	gb ADTU01018997.1	gb AEAB01021790.1	
Ion-transport-peptide-like (<i>A.echinator</i>)	tr F4WAC6	gb ADTU01018997.1	gb AEAB01021789.1	gb AEAC01008001.1

			gb AEAB01021790.1	
Ion-transport-peptide (<i>B.mori</i>)	tr Q1XAU6	gb ADTU01018997.1	gb AEAB01021789.1	gb AEAC01008001.1
Ion-transport-peptide (<i>M.sexata</i>)	tr Q1XAU8	gb ADTU01018997.1	gb AEAB01021789.1	gb AEAC01008001.1
Peptide hormones/ GPCR ligands				
Eclosion-hormone (<i>A.echinator</i>)	tr F4WBP0	gb ADTU01024031.1	gb AEAB01027960.1	gb AEAC01015798.1
Eclosion-hormone (<i>C.floridanus</i>) [§]	tr E2AXD4	gb ADTU01024031.1	n.a.	gb AEAC01015798.1
Eclosion-hormone (<i>H.saltator</i>) [§]	tr E2BSX6	gb ADTU01024031.1	gb AEAB01027960.1	n.a.
Eclosion-hormone (<i>D.melanogaster</i>)	sp Q07892	gb ADTU01024031.1	gb AEAB01027960.1	gb AEAC01015798.1
Neuroparsin-A (<i>C.floridanus</i>) [§]	tr E1ZXL4	gb ADTU01005355.1	n.a.	gb AEAC01011937.1
Neuroparsin-A (<i>H.saltator</i>) [§]	tr E2BLJ9	gb ADTU01005355.1	gb AEAB01002251.1	n.a.
Neuroparsin-A (<i>L.migratoria</i>)	sp P10776	gb ADTU01005355.1	gb AEAB01002251.1	gb AEAC01011937.1
Parathyroid hormone-related peptide (<i>A.mellifera</i>)	XP001122670.2	gb ADTU01018725.1 gb ADTU01018724.1 gb ADTU01009906.1	gb AEAB01003949.1 gb AEAB01020496.1	gb AEAC01011813.1
Prohormone-1 (<i>A.mellifera</i>)	sp P85798	gb ADTU01027989.1	gb AEAB01008908.1	gb AEAC01000861.1
Prohormone-2 (<i>A.mellifera</i>)	sp P85799	gb ADTU01018849.1	gb AEAB01004019.1	gb AEAC01018572.1
Prohormone-3 (<i>A.mellifera</i>)	sp P85828	gb ADTU01008748.1	gb AEAB01013608.1 gb AEAB01013607.1	gb AEAC01022581.1
Prohormone-4 (<i>A.mellifera</i>)	sp P85831	gb ADTU01028453.1 gb ADTU01027871.1	gb AEAB01027841.1	gb AEAC01017641.1
Other regulatory peptides and peptide hormones				
Bombyxin (<i>A.mellifera</i>)	tr D5L5R1	gb ADTU01003244.1	gb AEAB01028366.1 gb AEAB01014084.1	gb AEAC01019650.1
Latrophilin-3 (<i>C.floridanus</i>) [§]	tr E2A464	gb ADTU01022358.1 gb ADTU01028440.1 gb ADTU01031332.1	n.a.	gb AEAC01003294.1
Prothoracicotropic hormone (<i>D.melanogaster</i>)	tr Q9VPR8			
Protein pigment dispersing factor (PDF) (<i>D.melanogaster</i>)	sp O96690	gb ADTU01028995.1	gb AEAB01027821.1	gb AEAC01018247.1
Queen brain-selective protein-1 (<i>A.mellifera</i>)	tr Q1T786	gb ADTU01005355.1	gb AEAB01002251.1	gb AEAC01011937.1

* ant genome WGS database hits of selected peptides were used for further tBLASTn and genome-mining approach as described in the manuscript; color coding: green = putative peptides found in all three ant species, yellow = putative peptides found in at least one species, red = no peptides found in *A.cephalotes*, *C.floridanus*, *H.saltator* using tBLASTn; [#] not applicable, n.a. since the query protein was from this species; [§]UniProtKB entries of these peptides have been released during the preparation of the manuscript for reference see Bonasio *et al.* (2010) Science 329: 1068-1071; [&]During the preparation of this manuscript the receptor sequences for tachykinins were released on UniProtKB: *C.floridanus*: tr|E2AB29, tr|E2AB30, tr|E2ALS3, tr|E2ALS4; *H.saltator*: tr|E2B748, tr|E2B749; ⁺GPCRs from *C.floridanus* and *H.saltator* have been annotated for these ligands, for reference see Bonasio *et al.* (2010)