

**Table S1.** Source and release date of proteome dataset

<b>Organism</b>	<b>Source</b>	<b>Version [Release Date]</b>
<i>Anopheles gambiae</i>	<a href="http://agambiae.vectorbase.org/downloads/public_data/organism_data/agambiae/Geneset/agambiae.PEPTIDES-AgamP3.6.fa.gz">http://agambiae.vectorbase.org/downloads/public_data/organism_data/agambiae/Geneset/agambiae.PEPTIDES-AgamP3.6.fa.gz</a>	3.6 [DEC 2010]
<i>Aedes aegypti</i>	<a href="http://aaegypti.vectorbase.org/downloads/public_data/organism_data/aaegypti/Geneset/aaegypti.PEPTIDES-AaegL1.3.fa.gz">http://aaegypti.vectorbase.org/downloads/public_data/organism_data/aaegypti/Geneset/aaegypti.PEPTIDES-AaegL1.3.fa.gz</a>	1.3 [MAR 2012]
<i>Culex quinquefasciatus</i>	<a href="http://cquinquefasciatus.vectorbase.org/downloads/public_data/organism_data/cquinquefasciatus/Geneset/cquinquefasciatus.PEPTIDES-CpipJ1.3.fa.gz">http://cquinquefasciatus.vectorbase.org/downloads/public_data/organism_data/cquinquefasciatus/Geneset/cquinquefasciatus.PEPTIDES-CpipJ1.3.fa.gz</a>	1.3 [JAN 2012]
<i>Ixodes scapularis</i>	<a href="http://iscapularis.vectorbase.org/downloads/public_data/organism_data/iscapularis/Geneset/iscapularis.PEPTIDES-IscaW1.2.fa.gz">http://iscapularis.vectorbase.org/downloads/public_data/organism_data/iscapularis/Geneset/iscapularis.PEPTIDES-IscaW1.2.fa.gz</a>	1.2 [MAR 2012]
<i>Pediculus humanus</i>	<a href="http://phumanus.vectorbase.org/downloads/public_data/organism_data/phumanus/Geneset/phumanus.PEPTIDES-PhumU1.2.fa.gz">http://phumanus.vectorbase.org/downloads/public_data/organism_data/phumanus/Geneset/phumanus.PEPTIDES-PhumU1.2.fa.gz</a>	1.2 [FEB 2010]
<i>Rhodnius prolixus</i>	<a href="http://rprolixus.vectorbase.org/downloads/public_data/organism_data/rprolixus/Geneset/rprolixus.PEPTIDES-RproC1.fa.gz">http://rprolixus.vectorbase.org/downloads/public_data/organism_data/rprolixus/Geneset/rprolixus.PEPTIDES-RproC1.fa.gz</a>	1.0 [JUN 2010]
<i>Saccharomyces cerevisiae</i>	<a href="ftp://genome-ftp.stanford.edu/pub/yeast/data_download/sequence/genomic_sequence/orf_protein/orf_trans_all.fasta.gz">ftp://genome-ftp.stanford.edu/pub/yeast/data_download/sequence/genomic_sequence/orf_protein/orf_trans_all.fasta.gz</a>	N/A [FEB 2012]
<i>Drosophila melanogaster</i>	<a href="ftp://ftp.flybase.net/genomes/Drosophila_melanogaster/dmel_r5.48_FB2012_06/fasta/dmel-all-translation-r5.48.fasta.gz">ftp://ftp.flybase.net/genomes/Drosophila_melanogaster/dmel_r5.48_FB2012_06/fasta/dmel-all-translation-r5.48.fasta.gz</a>	5.48 [OCT 2012]
<i>Mus musculus</i>	<a href="ftp://ftp.ncbi.nlm.nih.gov/genomes/M_musculus/protein/protein.fa.gz">ftp://ftp.ncbi.nlm.nih.gov/genomes/M_musculus/protein/protein.fa.gz</a>	N/A [OCT 2012]
<i>Homo sapiens</i>	<a href="ftp://ftp.ncbi.nlm.nih.gov/genomes/H_sapiens/protein/protein.fa.gz">ftp://ftp.ncbi.nlm.nih.gov/genomes/H_sapiens/protein/protein.fa.gz</a>	N/A [NOV 2012]