

Table S1. The role of *A. aegypti* homologues in WNV infection, Related to Figure 1.

Gene Symbol in man	GenBank No.	Expression at 1 day post WNV infection (Fold/Mock)	Expression at 8 days post WNV infection (Fold/Mock)	WNV burden at 6 days (Fold/Mock)	<i>p</i> value	Description
ABCB10	AAEL000434	2.2	1.2	2.16±0.95	<i>p</i> <0.005	Resistance factor ^b
ABCE1	AAEL010059	4.4	0.9	1.28±0.29		
ABLIM	AAEL008358	2.1	0.9	2.17±0.93	<i>p</i> <0.005	Resistance factor
ACSM3	AAEL000321	3	1.8	1.02±0.33		
ADRA1D	AAEL011844	1.7	0.9	2.13±0.96	<i>p</i> <0.05	Resistance factor
ANKRD27	AAEL008819	2.8	0.8	1.50±0.79		
AP1M1	AAEL007124	2	1	0.43±0.34	<i>p</i> <0.01	Susceptibility factor ^c
AP3S2	AAEL001405	2.1	1.1	1.93±0.53	<i>p</i> <0.01	Resistance factor
ATXN7L3	AAEL004574	2	1.4	0.48±0.46	<i>p</i> <0.05	Susceptibility factor
BCKDHA	AAEL008366	3.3	1.4	1.30±0.54		
C18ORF22	AAEL013615	3.3	1.1	1.88±1.08		
CLEC4C	AAEL000283	2.6	3.5	N.A. ^a		
CLECSF6	AAEL011404	1.7	0.9	1.40±0.42		
CSNK2A1	AAEL012094	3.7	1.1	0.36±0.19	<i>p</i> <0.01	Susceptibility factor
CTSE	AAEL006169	3.1	1.4	2.24±1.74		
DDX28	AAEL004456	2.3	1.4	1.27±0.35		
DERL2	AAEL008425	1.7	2	1.79±1.12		
EXOSC9	AAEL000659	2.5	1.3	1.61±0.63		
MATN4	AAEL014547	1	2.3	2.65±0.95	<i>p</i> <0.01	Resistance factor
MBL2	AAEL000563	4.1	3.6	0.14±0.15	<i>p</i> <0.002	Susceptibility factor

OTUB2	AAEL007710	2	1	1.40±0.69		
PGLYRP3	AAEL007039	0.6	0.6	0.40±0.11	<i>p</i> <0.005	Susceptibility factor
PIAS2	AAEL015099	2.1	0.9	2.17±0.76	<i>p</i> <0.005	Resistance factor
PP1201	AAEL011221	2.2	1.7	1.79±1.33		
RPS6KL1	AAEL011145	2.3	1.2	2.18±1.65		
SFXN2	AAEL009810	2.1	2.3	1.50±0.56		
SHC1/2	AAEL008739	2.9	0.8	0.96±0.92		
SOX13	AAEL005518	2	1	0.99±0.62		
TDRD1	AAEL014694	1.9	0.5	N.A.		
TRPM3	AAEL013378	2.3	1.1	2.62±1.42	<i>p</i> <0.005	Resistance factor
WDR18	AAEL014037	2.6	1.4	0.24±0.22	<i>p</i> <0.005	Susceptibility factor
XYLB	AAEL010206	2	1	N.A.		

Data were based on 283 proteins that facilitate WNV infection. We measured the expression profile of 215 *A. aegypti* homologues and targeted 32 genes that were significantly influenced by WNV infection using a RNAi screen (shown in the table). Double-strand RNA (dsRNA) was synthesized and microinjected into the mosquito thorax to knock down the target gene. After 3 days post dsRNA microinjection, 10 M.I.D₅₀ (Mosquito Infective Dose 50%) WNV was injected into the mosquitoes. After 6 days, mosquitoes were sacrificed and the virus burden assessed. Thirteen of the 32 genes, which were silenced, were associated with a significant alternation of the virus burden (*p*<0.05). Statistical analysis was done with the Mann-Whitney test.

^a NA, gene not analyzed.

^b Resistance factor for WNV infection.

^c Susceptibility factor for WNV infection

Table S2. The expression of the *mosGCTL* family members in adult female *A. aegypti*, Related to Figure 2.

mosGCTL subtypes	Expression
AAEL000283	Yes
AAEL000535	Yes
AAEL000543	Yes
AAEL000563	Yes
AAEL000556	Yes
AAEL002524	Yes
AAEL004679	Yes
AAEL005641	Yes
AAEL006456	Yes
AAEL008299	Yes
AAEL009209	Yes
AAEL011079	No
AAEL011402	No
AAEL011404	Yes
AAEL011408	Yes
AAEL011446	No
AAEL011453	Yes
AAEL011455	Yes
AAEL011607	Yes
AAEL011610	Yes
AAEL011612	Yes
AAEL011619	Yes
AAEL014382	Yes
AAEL014385	No
AAEL014390	Yes

Table S3. *A. aegypti* homologues of human proteins interacting with human *MBL*, Related to Figure 4.

Proteins interacting with MBL in man			Homologues in <i>A. aegypti</i>	
Name	Abbreviation	Localization	Gene No.	Abbreviation
Calcitonin receptor	CTR	Cell surface	AAEL010043	mosCTR
Calreticulin	CRTC	Cell surface	AAEL011773	mosCRTC
Complement 1q receptor	C1q receptor	Cell surface	None	
Keratin 1	K1	Cell surface	None	
MBL serine protease 2	MAP19	Cell surface	None	
Protein tyrosine phosphatase receptor C	PTPRC/CD45	Cell surface	AAEL013105 AAEL005284	mosPTP-1 mosPTP-2
Sedlin	MIP-2A/SEDL	Endoplasmic reticulum	AAEL008255	mosSEDL
MBL serine protease 1	CRARF/MASP	Cell surface	None	
MAD2 mitotic arrest deficient like 1	MAD2	Nucleus	AAEL008316 AAEL015560 AAEL013600	mosMAD2 mosIGA1 mosIGA2
Integrin alpha2/beta1	IGA2/IGB1	Cell surface	AAEL011381 AAEL014660 AAEL012466	mosIGA3 mosIGA4 mosIGB

This information was obtained from the Human Protein Reference Database (HPRD) (<http://www.hprd.org>).

Table S4. Primers and probes for Q-PCR, dsRNA synthesis and genes cloning

The primers for double-strand RNA synthesis	Upper primer	Lower primer	
<i>A. aegypti mosGCTL-1</i>	TAATACGACTCACTATAGGGTCCCAGCATTC-GAGCTAACTGG	TAATACGACTCACTATAGGGCCTG-CGCAGGTGTTATCATTCC	
<i>A. aegypti mosPTP-1</i>	TAATACGACTCACTATAGGGAGTGCCCGA-AAGTGGTCAAC	TAATACGACTCACTATAGGGCTGC-GAGTGCTCCGAAGGGTAT	
<i>C. quinquefasciatus mosGCTL-1</i>	TAATACGACTCACTATAGGGAATGCGGCTG-GTCACGATAAAAT	TAATACGACTCACTATAGGGACGG-CACCTCCTCGCACAC	
<i>C. quinquefasciatus mosPTP-1</i>	TAATACGACTCACTATAGGGATCGTGGCCG-CGTTCACTAAA	TAATACGACTCACTATAGGGCGAC-GGCGGTGGGATTTTT	
<i>GFP</i>	TAATACGACTCACTATAGGGGCCGCTACCC-CGACCACAT	TAATACGACTCACTATAGGGGGGC-GGACTGGGTGCTCA	
The primers for RT-QPCR	Upper primer	Lower primer	Probe (for Taqman QPCR)
<i>A. aegypti mosGCTL-1 for Taqman QPCR</i>	CGATCGCAGGAGGACAAC	GAAGCTGCAGTTATCGGTAAACTT	FAM6-ATGCCGTCGCACGATACGTCCG-TRAMA
<i>WNV E gene</i>	TTCTCGAAGGCGACAGCTG	CCGCCTCCATATTCATCATC	FAM6-ATGTCTAAGGACAAGCCTACCATC-TRAMA
<i>DENV-2 E gene</i>	CATTCCAAGTGAGAATCTCTTTGTCA	CAGATCTCTGATGAATAACCAACG	FAM6-ATGCTGAAACGCGAGAGAAACCGC-TRAMA
<i>A. aegypti Actin</i>	GAACACCCAGTCTCTGCTGACA	TGCGTCATCTTCTCACGGTTAG	FAM6-AGGCCCCGCTCAACCCGAAG-TRAMA
<i>C. quinquefasciatus Actin</i>	CCCCCTGAGCGCAAGTACT	CGTCGTATTCCTGCTTGAGAT	FAM6-TGGCCTCGCTGTCCACCTTCCA-TRAMA
<i>A. aegypti mosGCTL-1 for SYBR Green QPCR</i>	GTTCTCGTACATTCATCTCATG	CTTGAACCAGTTAGCTCGAA	
<i>A. aegypti mosPTP-1</i>	CAGGCGCTTCCCGTTAGTGT	TATCCGCGTGAGGCTGGTCT	
<i>C. quinquefasciatus mosGCTL-1</i>	TCAAGAAAACCGCAAACCTGGT	TTTTCGGCTGCGGATTTTATCG	
<i>C. quinquefasciatus mosPTP-1</i>	CGCACGGCTATCCGACCTTCTC	TCGCCCCGTTTCAGTTTCTCTGG	
<i>D. melanogaster Actin</i>	CCCAAGGCCAACCGTGAGAA	CGGAGGCGTACAGCGAGAGC	
The primers for genes cloning	Upper primer	Lower primer	
<i>mosPTP-1-Ex</i> (plus HA tag in the N-terminal)	TCTGACCATGGTACCCATACGATGTTCCAG-ATTACGCTCTTACTGTCAATCTAACCGAATC	TCTGAGAATTCTCACAGATTGTAAT-CATCGTACAC	
<i>mosPTP-1</i> (plus HA tag in the N-terminal)	TCTGACCATGGTACCCATACGATGTTCCAG-ATTACGCTCTTACTGTCAATCTAACCGAATC	TCTGAGAATTCTCAGTCAATGTTGT-TCACAAGTC	
<i>mosGCTL-1</i> cloned into pMT/BiP/V5-His A vector	TCTGAAGATCTGATTCTACGCCAAATCGAA	TCTGACTCGAGAAACGGTTGCACA-CAATCAC	

