

**Table S1** Mouse group sizes and survival analyses by Prism

<b>Figure 1A</b>								
Genotype	Wildtype	Wildtype	Wildtype	Wildtype	<i>Tlr9</i> <sup>-/-</sup>	<i>Tlr9</i> <sup>-/-</sup>	<i>Tlr9</i> <sup>-/-</sup>	<i>Tlr9</i> <sup>-/-</sup>
Treatment	PBS	Pam2	ODN	Pam2ODN	PBS	Pam2	ODN	Pam2ODN
Mouse n #	18	18	18	18	18	18	18	17
Comparison of Survival Curves					Log-rank (Mantel-Cox) test			
Multiple curves					P<0.0001			
Wildtype + PBS vs. Wildtype + Pam2ODN					P<0.0001			
Wildtype + Pam2 vs. Wildtype + Pam2ODN					P<0.0001			
Wildtype + ODN vs. Wildtype + Pam2ODN					P<0.0001			
<i>Tlr9</i> <sup>-/-</sup> + PBS vs. <i>Tlr9</i> <sup>-/-</sup> + Pam2ODN					P<0.0001			
<i>Tlr9</i> <sup>-/-</sup> + Pam2 vs. <i>Tlr9</i> <sup>-/-</sup> + Pam2ODN					P=0.0044			
<i>Tlr9</i> <sup>-/-</sup> + ODN vs. <i>Tlr9</i> <sup>-/-</sup> + Pam2ODN					P<0.0001			
<i>Tlr9</i> <sup>-/-</sup> + Pam2ODN vs. Wildtype + Pam2ODN					P=0.0261			
Bonferroni-corrected P value					P=0.0071			
<b>Figure 1B</b>								
Genotype	Wildtype	Wildtype	Wildtype	Wildtype	<i>Tlr9</i> <sup>-/-</sup>	<i>Tlr9</i> <sup>-/-</sup>	<i>Tlr9</i> <sup>-/-</sup>	<i>Tlr9</i> <sup>-/-</sup>
Treatment	PBS	Pam2	ODN	Pam2ODN	PBS	Pam2	ODN	Pam2ODN
Mouse n #	30	30	30	30	30	30	30	30
Comparison of Survival Curves					Log-rank (Mantel-Cox) test			
Multiple curves					P<0.0001			
Wildtype + PBS vs. Wildtype + Pam2ODN					P<0.0001			
Wildtype + Pam2 vs. Wildtype + Pam2ODN					P<0.0001			
Wildtype + ODN vs. Wildtype + Pam2ODN					P<0.0001			
<i>Tlr9</i> <sup>-/-</sup> + PBS vs. <i>Tlr9</i> <sup>-/-</sup> + Pam2ODN					P<0.0001			
<i>Tlr9</i> <sup>-/-</sup> + Pam2 vs. <i>Tlr9</i> <sup>-/-</sup> + Pam2ODN					P=0.0055			
<i>Tlr9</i> <sup>-/-</sup> + ODN vs. <i>Tlr9</i> <sup>-/-</sup> + Pam2ODN					P<0.0001			
<i>Tlr9</i> <sup>-/-</sup> + Pam2ODN vs. Wildtype + Pam2ODN					P=0.0163			
Bonferroni-corrected P value					P=0.0071			
<b>Figure 3A</b>								
Genotype	Wildtype	Wildtype	Wildtype	<i>Rigi</i> <sup>-/-</sup>	<i>Rigi</i> <sup>-/-</sup>	<i>Rigi</i> <sup>-/-</sup>		
Treatment	PBS	Pam2	Pam2ODN	PBS	Pam2	Pam2ODN		
Mouse n #	28	35	38	28	35	38		
Comparison of Survival Curves					Log-rank (Mantel-Cox) test			
Multiple curves					P<0.0001			
Wildtype + PBS vs. Wildtype + Pam2ODN					P<0.0001			
Wildtype + Pam2 vs. Wildtype + Pam2ODN					P<0.0001			
<i>Rigi</i> <sup>-/-</sup> + PBS vs. <i>Rigi</i> <sup>-/-</sup> + Pam2ODN					P<0.0001			
<i>Rigi</i> <sup>-/-</sup> + Pam2 vs. <i>Rigi</i> <sup>-/-</sup> + Pam2ODN					P=0.0012			
<i>Rigi</i> <sup>-/-</sup> + Pam2ODN vs. Wildtype + Pam2ODN					P<0.0001			

Bonferroni-corrected P value					P=0.01		
<b>Figure 3B</b>							
Genotype	Wildtype	Wildtype	Wildtype	<i>Tlr9<sup>-/-</sup>; Rigi<sup>-/-</sup></i>	<i>Tlr9<sup>-/-</sup>; Rigi<sup>-/-</sup></i>	<i>Tlr9<sup>-/-</sup>; Rigi<sup>-/-</sup></i>	
Treatment	PBS	Pam2	Pam2ODN	PBS	Pam2	Pam2ODN	
Mouse n #	25	25	25	25	25	27	
Comparison of Survival Curves					Log-rank (Mantel-Cox) test		
Multiple curves					P<0.0001		
Wildtype + PBS vs. Wildtype + Pam2ODN					P<0.0001		
Wildtype + Pam2 vs. Wildtype + Pam2ODN					P<0.0001		
<i>Tlr9<sup>-/-</sup> Rigi<sup>-/-</sup> + PBS vs. Tlr9<sup>-/-</sup> Rigi<sup>-/-</sup> + Pam2ODN</i>					P<0.0001		
<i>Tlr9<sup>-/-</sup> Rigi<sup>-/-</sup> + Pam2 vs. Tlr9<sup>-/-</sup> Rigi<sup>-/-</sup> + Pam2ODN</i>					P=0.0656		
<i>Tlr9<sup>-/-</sup> Rigi<sup>-/-</sup> + Pam2ODN vs. Wildtype + Pam2ODN</i>					P<0.0001		
Bonferroni-corrected P value					P=0.01		
<b>Figure 3C</b>							
Genotype	Wildtype	Wildtype	<i>Rigi<sup>-/-</sup></i>	<i>Rigi<sup>-/-</sup></i>			
Treatment	PBS	Pam2ODN	PBS	Pam2ODN			
Mouse n #	38	39	40	46			
Comparison of Survival Curves					Log-rank (Mantel-Cox) test		
Multiple curves					P<0.0001		
Wildtype + PBS vs. Wildtype + Pam2ODN					P<0.0001		
<i>Rigi<sup>-/-</sup> + PBS vs. Rigi<sup>-/-</sup> + Pam2ODN</i>					P<0.0001		
<i>Rigi<sup>-/-</sup> + Pam2ODN vs. Wildtype + Pam2ODN</i>					P<0.0001		
Bonferroni-corrected P value					P=0.0167		
<b>Figure 5A</b>							
Genotype	Wildtype	Wildtype	Wildtype	<i>Mavs<sup>-/-</sup></i>	<i>Mavs<sup>-/-</sup></i>	<i>Mavs<sup>-/-</sup></i>	
Treatment	PBS	Pam2	Pam2ODN	PBS	Pam2	Pam2ODN	
Mouse n #	30	42	45	30	45	45	
Comparison of Survival Curves					Log-rank (Mantel-Cox) test		
Multiple curves					P<0.0001		
Wildtype + PBS vs. Wildtype + Pam2ODN					P<0.0001		
Wildtype + Pam2 vs. Wildtype + Pam2ODN					P<0.0001		
<i>Mavs<sup>-/-</sup> + PBS vs. Mavs<sup>-/-</sup> + Pam2ODN</i>					P<0.0001		
<i>Mavs<sup>-/-</sup> + Pam2 vs. Mavs<sup>-/-</sup> + Pam2ODN</i>					P=0.0018		
<i>Mavs<sup>-/-</sup> + Pam2ODN vs. Wildtype + Pam2ODN</i>					P=0.0009		
Bonferroni-corrected P value					P=0.01		
<b>Figure 5B</b>							
Genotype	Wildtype	Wildtype	Wildtype	<i>Tlr9<sup>-/-</sup>; ;Mavs<sup>-/-</sup></i>	<i>Tlr9<sup>-/-</sup>; ;Mavs<sup>-/-</sup></i>	<i>Tlr9<sup>-/-</sup>; ;Mavs<sup>-/-</sup></i>	

Treatment	PBS	Pam2	Pam2ODN	PBS	Pam2	Pam2ODN		
Mouse n #	35	35	35	35	35	35		
Comparison of Survival Curves					Log-rank (Mantel-Cox) test			
Multiple curves					P<0.0001			
Wildtype + PBS vs. Wildtype + Pam2ODN					P<0.0001			
Wildtype + Pam2 vs. Wildtype + Pam2ODN					P<0.0001			
<i>Tlr9</i> <sup>-/-</sup> + PBS vs. <i>Tlr9</i> <sup>-/-</sup> + Pam2ODN					P<0.0001			
<i>Tlr9</i> <sup>-/-</sup> + Pam2 vs. <i>Tlr9</i> <sup>-/-</sup> + Pam2ODN					P=0.2476			
<i>Tlr9</i> <sup>-/-</sup> + Pam2ODN vs. Wildtype + Pam2ODN					P<0.0001			
Bonferroni-corrected P value					P=0.01			
<b>Figure 5C</b>								
Genotype	Wildtype	Wildtype	<i>Mavs</i> <sup>-/-</sup>	<i>Mavs</i> <sup>-/-</sup>				
Treatment	PBS	Pam2ODN	PBS	Pam2ODN				
Mouse n #	31	32	37	38				
Comparison of Survival Curves					Log-rank (Mantel-Cox) test			
Multiple curves					P<0.0001			
Wildtype + PBS vs. Wildtype + Pam2ODN					P<0.0001			
<i>Mavs</i> <sup>-/-</sup> + PBS vs. <i>Mavs</i> <sup>-/-</sup> + Pam2ODN					P<0.0001			
<i>Mavs</i> <sup>-/-</sup> + Pam2ODN vs. Wildtype + Pam2ODN					P<0.0001			
Bonferroni-corrected P value					P=0.0167			
<b>Figure 6A</b>								
Genotype	Wildtype	Wildtype	<i>Tlr9</i> <sup>-/-</sup>	<i>Tlr9</i> <sup>-/-</sup>				
Treatment	PBS	ODN	PBS	ODN				
Mouse n #	8	8	25	25				
Comparison of Survival Curves					Log-rank (Mantel-Cox) test			
Multiple curves					P=0.0003			
<i>Tlr9</i> <sup>-/-</sup> + PBS vs. <i>Tlr9</i> <sup>-/-</sup> + ODN					P<0.0001			
<i>Tlr9</i> <sup>-/-</sup> + PBS vs. Wildtype + PBS					P=0.0142			
Bonferroni-corrected P value					P=0.0167			
<b>Figure 6B</b>								
Genotype	Wildtype	Wildtype	<i>Rig-i</i> <sup>-/-</sup>	<i>Rig-i</i> <sup>-/-</sup>				
Treatment	PBS	ODN	PBS	ODN				
Mouse n #	15	15	15	15				
Comparison of Survival Curves					Log-rank (Mantel-Cox) test			
Multiple curves					P=0.0004			
<i>Rig-i</i> <sup>-/-</sup> + PBS vs. <i>Rig-i</i> <sup>-/-</sup> + ODN					P=0.0330			
<i>Rig-i</i> <sup>-/-</sup> + PBS vs. Wildtype + PBS					P=0.0063			
Bonferroni-corrected P value					P=0.025			
<b>Figure 6C</b>								

Genotype	Wildtype	Wildtype	<i>Mavs</i> <sup>-/-</sup>	<i>Mavs</i> <sup>-/-</sup>				
Treatment	PBS	ODN	PBS	ODN				
Mouse n #	16	16	49	51				
Comparison of Survival Curves					Log-rank (Mantel-Cox) test			
Multiple curves					P<0.0001			
<i>Mavs</i> <sup>-/-</sup> + PBS vs. <i>Mavs</i> <sup>-/-</sup> + ODN					P<0.0001			
<i>Mavs</i> <sup>-/-</sup> + PBS vs. Wildtype + PBS					P=0.0094			
Bonferroni-corrected P value					P=0.025			
<b>Figure 6D</b>								
Genotype	Wildtype	Wildtype	<i>Tlr9</i> <sup>-/-</sup> ; <i>Mavs</i> <sup>-/-</sup>	<i>Tlr9</i> <sup>-/-</sup> ; <i>Mavs</i> <sup>-/-</sup>				
Treatment	PBS	ODN	PBS	ODN				
Mouse n #	9	9	27	27				
Comparison of Survival Curves					Log-rank (Mantel-Cox) test			
Multiple curves					P=0.0053			
<i>Tlr9</i> <sup>-/-</sup> <i>Mavs</i> <sup>-/-</sup> + PBS vs. <i>Tlr9</i> <sup>-/-</sup> <i>Mavs</i> <sup>-/-</sup> + ODN					P=0.94			
<i>Tlr9</i> <sup>-/-</sup> <i>Mavs</i> <sup>-/-</sup> + PBS vs. Wildtype + PBS					P=0.0234			
Bonferroni-corrected P value					P=0.025			
<b>Figure 6E</b>								
Genotype	Wildtype	Wildtype	<i>MyD88</i> <sup>-/-</sup> ; <i>Mavs</i> <sup>-/-</sup>	<i>MyD88</i> <sup>-/-</sup> ; <i>Mavs</i> <sup>-/-</sup>				
Treatment	PBS	ODN	PBS	ODN				
Mouse n #	10	10	24	24				
Comparison of Survival Curves					Log-rank (Mantel-Cox) test			
Multiple curves					P<0.0001			
<i>MyD88</i> <sup>-/-</sup> <i>Mavs</i> <sup>-/-</sup> + PBS vs. <i>MyD88</i> <sup>-/-</sup> <i>Mavs</i> <sup>-/-</sup> + ODN					P=0.3617			
<i>MyD88</i> <sup>-/-</sup> <i>Mavs</i> <sup>-/-</sup> + PBS vs. Wildtype + PBS					P=0.0190			
Bonferroni-corrected P value					P=0.025			
<b>Figure 7A</b>								
Genotype	Wildtype	Wildtype	<i>Tlr9</i> <sup>-/-</sup>	<i>Tlr9</i> <sup>-/-</sup>				
Treatment	PBS	ODN	PBS	ODN				
Mouse n #	10	10	24	24				
Comparison of Survival Curves					Log-rank (Mantel-Cox) test			
Multiple curves					P<0.0001			
<i>Tlr9</i> <sup>-/-</sup> + PBS vs. <i>Tlr9</i> <sup>-/-</sup> + ODN					P=0.0006			
<i>Tlr9</i> <sup>-/-</sup> + PBS vs. Wildtype + PBS					P=0.0042			
Bonferroni-corrected P value					P=0.025			
<b>Figure 7B</b>								
Genotype	Wildtype	Wildtype	<i>Rig-i</i> <sup>-/-</sup>	<i>Rig-i</i> <sup>-/-</sup>				

Treatment	PBS	ODN	PBS	ODN				
Mouse n #	18	18	21	21				
Comparison of Survival Curves					Log-rank (Mantel-Cox) test			
Multiple curves					P<0.0001			
<i>Rig-i</i> <sup>-/-</sup> + PBS vs. <i>Rig-i</i> <sup>-/-</sup> + ODN					P=0.0046			
<i>Rig-i</i> <sup>-/-</sup> + PBS vs. Wildtype + PBS					P=0.0035			
Bonferroni-corrected P value					P=0.025			
<b>Figure 7C</b>								
Genotype	Wildtype	Wildtype	<i>Mavs</i> <sup>-/-</sup>	<i>Mavs</i> <sup>-/-</sup>				
Treatment	PBS	ODN	PBS	ODN				
Mouse n #	20	20	40	40				
Comparison of Survival Curves					Log-rank (Mantel-Cox) test			
Multiple curves					P<0.0001			
<i>Mavs</i> <sup>-/-</sup> + PBS vs. <i>Mavs</i> <sup>-/-</sup> + ODN					P<0.0001			
<i>Mavs</i> <sup>-/-</sup> + PBS vs. Wildtype + PBS					P<0.0001			
Bonferroni-corrected P value					P=0.025			
<b>Figure 7D</b>								
Genotype	Wildtype	Wildtype	<i>Tlr9</i> <sup>-/-</sup> ; <i>Mavs</i> <sup>-/-</sup>	<i>Tlr9</i> <sup>-/-</sup> ; <i>Mavs</i> <sup>-/-</sup>				
Treatment	PBS	ODN	PBS	ODN				
Mouse n #	10	10	30	30				
Comparison of Survival Curves					Log-rank (Mantel-Cox) test			
Multiple curves					P<0.0001			
<i>Tlr9</i> <sup>-/-</sup> <i>Mavs</i> <sup>-/-</sup> + PBS vs. <i>Tlr9</i> <sup>-/-</sup> <i>Mavs</i> <sup>-/-</sup> + ODN					P=0.0526			
<i>Tlr9</i> <sup>-/-</sup> <i>Mavs</i> <sup>-/-</sup> + PBS vs. Wildtype + PBS					P=0.0003			
Bonferroni-corrected P value					P=0.025			
<b>Figure 7E</b>								
Genotype	Wildtype	Wildtype	<i>MyD88</i> <sup>-/-</sup> ; <i>Mavs</i> <sup>-/-</sup>	<i>MyD88</i> <sup>-/-</sup> ; <i>Mavs</i> <sup>-/-</sup>				
Treatment	PBS	ODN	PBS	ODN				
Mouse n #	16	16	20	20				
Comparison of Survival Curves					Log-rank (Mantel-Cox) test			
Multiple curves					P<0.0001			
<i>MyD88</i> <sup>-/-</sup> <i>Mavs</i> <sup>-/-</sup> + PBS vs. <i>MyD88</i> <sup>-/-</sup> <i>Mavs</i> <sup>-/-</sup> + ODN					P=0.1855			
<i>MyD88</i> <sup>-/-</sup> <i>Mavs</i> <sup>-/-</sup> + PBS vs. Wildtype + PBS					P<0.0001			
Bonferroni-corrected P value					P=0.025			
<b>Figure 8A</b>								
Genotype	Wildtype	Wildtype	Wildtype	Wildtype	<i>Tlr9</i> <sup>-/-</sup> ; <i>Mavs</i> <sup>-/-</sup>	<i>Tlr9</i> <sup>-/-</sup> ; <i>Mavs</i> <sup>-/-</sup>	<i>Tlr9</i> <sup>-/-</sup> ; <i>Mavs</i> <sup>-/-</sup>	<i>Tlr9</i> <sup>-/-</sup> ; <i>Mavs</i> <sup>-/-</sup>

Treatment	PBS	Pam2	ODN	Pam2ODN	PBS	Pam2	ODN	Pam2ODN
Mouse n #	10	10	10	10	10	10	10	10
Comparison of Survival Curves					Log-rank (Mantel-Cox) test			
Multiple curves					P<0.0001			
Wildtype + PBS vs. Wildtype + Pam2ODN					P<0.0001			
Wildtype + Pam2 vs. Wildtype + Pam2ODN					P=0.0046			
Wildtype + ODN vs. Wildtype + Pam2ODN					P=0.0013			
<i>Tlr9</i> <sup>-/-</sup> <i>Mavs</i> <sup>-/-</sup> + PBS vs. <i>Tlr9</i> <sup>-/-</sup> <i>Mavs</i> <sup>-/-</sup> + Pam2ODN					P=0.0004			
<i>Tlr9</i> <sup>-/-</sup> <i>Mavs</i> <sup>-/-</sup> + Pam2 vs. <i>Tlr9</i> <sup>-/-</sup> <i>Mavs</i> <sup>-/-</sup> + Pam2ODN					P=0.7336			
<i>Tlr9</i> <sup>-/-</sup> <i>Mavs</i> <sup>-/-</sup> + ODN vs. <i>Tlr9</i> <sup>-/-</sup> <i>Mavs</i> <sup>-/-</sup> + Pam2ODN					P=0.3598			
<i>Tlr9</i> <sup>-/-</sup> <i>Mavs</i> <sup>-/-</sup> + Pam2ODN vs. Wildtype + Pam2ODN					P=0.0040			
Bonferroni-corrected P value					P=0.0071			
<b>Figure 8B</b>								
Genotype	Wildtype	Wildtype	Wildtype	Wildtype	<i>Tlr9</i> <sup>-/-</sup> ; <i>Mavs</i> <sup>-/-</sup>	<i>Tlr9</i> <sup>-/-</sup> ; <i>Mavs</i> <sup>-/-</sup>	<i>Tlr9</i> <sup>-/-</sup> ; <i>Mavs</i> <sup>-/-</sup>	<i>Tlr9</i> <sup>-/-</sup> ; <i>Mavs</i> <sup>-/-</sup>
Treatment	PBS	Pam2	ODN	Pam2ODN	PBS	Pam2	ODN	Pam2ODN
Mouse n #	10	10	10	10	10	10	10	10
Comparison of Survival Curves					Log-rank (Mantel-Cox) test			
Multiple curves					P<0.0001			
Wildtype + PBS vs. Wildtype + Pam2ODN					P<0.0001			
Wildtype + Pam2 vs. Wildtype + Pam2ODN					P=0.0046			
Wildtype + ODN vs. Wildtype + Pam2ODN					P=0.0046			
<i>Tlr9</i> <sup>-/-</sup> <i>Mavs</i> <sup>-/-</sup> + PBS vs. <i>Tlr9</i> <sup>-/-</sup> <i>Mavs</i> <sup>-/-</sup> + Pam2ODN					P=0.0133			
<i>Tlr9</i> <sup>-/-</sup> <i>Mavs</i> <sup>-/-</sup> + Pam2 vs. <i>Tlr9</i> <sup>-/-</sup> <i>Mavs</i> <sup>-/-</sup> + Pam2ODN					P=0.6560			
<i>Tlr9</i> <sup>-/-</sup> <i>Mavs</i> <sup>-/-</sup> + ODN vs. <i>Tlr9</i> <sup>-/-</sup> <i>Mavs</i> <sup>-/-</sup> + Pam2ODN					P=0.0176			
<i>Tlr9</i> <sup>-/-</sup> <i>Mavs</i> <sup>-/-</sup> + Pam2ODN vs. Wildtype + Pam2ODN					P=0.0040			
Bonferroni-corrected P value					P=0.0071			

<b>Figure S1A</b>				
Genotype	Wildtype	Wildtype	<i>Cgas</i> <sup>-/-</sup>	<i>Cgas</i> <sup>-/-</sup>
Treatment	PBS	Pam2ODN	PBS	Pam2ODN
Mouse n #	10	10	8	9
Comparison of Survival Curves			Log-rank (Mantel-Cox) test	
Multiple curves			P<0.0001	
Wildtype + PBS vs. Wildtype + Pam2ODN			P=0.0046	
<i>Cgas</i> <sup>-/-</sup> + PBS vs. <i>Cgas</i> <sup>-/-</sup> + Pam2ODN			P=0.0007	
<i>Cgas</i> <sup>-/-</sup> + Pam2ODN vs. Wildtype + Pam2ODN			P=0.4355	
Bonferroni-corrected P value			P=0.0167	
<b>Figure S1B</b>				
Genotype	Wildtype	Wildtype	<i>Cgas</i> <sup>-/-</sup>	<i>Cgas</i> <sup>-/-</sup>

Treatment	PBS	Pam2ODN	PBS	Pam2ODN
Mouse n #	9	10	8	9
Comparison of Survival Curves			Log-rank (Mantel-Cox) test	
Multiple curves			P=0.0352	
Wildtype + PBS vs. Wildtype + Pam2ODN			P=0.0413	
<i>Cgas</i> <sup>-/-</sup> + PBS vs. <i>Cgas</i> <sup>-/-</sup> + Pam2ODN			P=0.0236	
<i>Cgas</i> <sup>-/-</sup> + Pam2ODN vs. Wildtype + Pam2ODN			P=0.6056	
Bonferroni-corrected P value			P=0.0167	
<b>Figure S1C</b>				
Genotype	Wildtype	Wildtype	<i>Sting</i> <sup>gt/gt</sup>	<i>Sting</i> <sup>gt/gt</sup>
Treatment	PBS	Pam2ODN	PBS	Pam2ODN
Mouse n #	11	12	12	12
Comparison of Survival Curves			Log-rank (Mantel-Cox) test	
Multiple curves			P=0.0009	
Wildtype + PBS vs. Wildtype + Pam2ODN			P=0.0094	
<i>Sting</i> <sup>gt/gt</sup> + PBS vs. <i>Sting</i> <sup>gt/gt</sup> + Pam2ODN			P=0.0191	
<i>Sting</i> <sup>gt/gt</sup> + Pam2ODN vs. Wildtype + Pam2ODN			P=0.0701	
Bonferroni-corrected P value			P=0.0167	
<b>Figure S1D</b>				
Genotype	Wildtype	Wildtype	<i>Sting</i> <sup>gt/gt</sup>	<i>Sting</i> <sup>gt/gt</sup>
Treatment	PBS	Pam2ODN	PBS	Pam2ODN
Mouse n #	8	10	9	10
Comparison of Survival Curves			Log-rank (Mantel-Cox) test	
Multiple curves			P<0.0001	
Wildtype + PBS vs. Wildtype + Pam2ODN			P<0.0001	
<i>Sting</i> <sup>gt/gt</sup> + PBS vs. <i>Sting</i> <sup>gt/gt</sup> + Pam2ODN			P<0.0001	
<i>Sting</i> <sup>gt/gt</sup> + Pam2ODN vs. Wildtype + Pam2ODN			P=0.9999	
Bonferroni-corrected P value			P=0.0167	
<b>Figure S1E</b>				
Genotype	Wildtype	Wildtype	<i>Ifi204</i> <sup>+/-</sup>	<i>Ifi204</i> <sup>+/-</sup>
Treatment	PBS	Pam2ODN	PBS	Pam2ODN
Mouse n #	10	10	10	10
Comparison of Survival Curves			Log-rank (Mantel-Cox) test	
Multiple curves			P=0.0007	
Wildtype + PBS vs. Wildtype + Pam2ODN			P=0.0040	
<i>Ifi204</i> <sup>+/-</sup> + PBS vs. <i>Ifi204</i> <sup>+/-</sup> + Pam2ODN			P=0.0141	
<i>Ifi204</i> <sup>+/-</sup> + Pam2ODN vs. Wildtype + Pam2ODN			P=0.1246	
Bonferroni-corrected P value			P=0.0167	
<b>Figure S7A</b>				
Genotype	Wildtype			
Mouse n #	10			
Comparison of Survival Curves			Log-rank (Mantel-Cox) test	

Multiple curves		P<0.0001	
1 x10 <sup>5</sup> PFU vs. 0 PFU		P<0.0001	
5 x10 <sup>4</sup> PFU vs. 0 PFU		P=0.0117	
2.5 x10 <sup>4</sup> PFU vs. 0 PFU		P=0.1462	
Bonferroni-corrected P value		P=0.0167	
<b>Figure S7B</b>			
Genotype	<i>Tlr9</i> <sup>-/-</sup>		
Mouse n #	5		
Comparison of Survival Curves		Log-rank (Mantel-Cox) test	
Multiple curves		P<0.0001	
1 x10 <sup>5</sup> PFU vs. 0 PFU		P=0.0035	
5 x10 <sup>4</sup> PFU vs. 0 PFU		P=0.0035	
2.5 x10 <sup>4</sup> PFU vs. 0 PFU		P=0.0126	
Bonferroni-corrected P value		P=0.0167	
<b>Figure S7C</b>			
Genotype	<i>Mavs</i> <sup>-/-</sup>		
Mouse n #	5		
Comparison of Survival Curves		Log-rank (Mantel-Cox) test	
Multiple curves		P<0.0001	
1 x10 <sup>5</sup> PFU vs. 0 PFU		P=0.0035	
5 x10 <sup>4</sup> PFU vs. 0 PFU		P=0.0031	
2.5 x10 <sup>4</sup> PFU vs. 0 PFU		P=0.0026	
Bonferroni-corrected P value		P=0.0167	



**Table S2** Protein candidates precipitated from biotinylated ODN M362 treated cells.

Accession	Score	Mass	Num. of matches	Num. of significant matches	Num. of sequences	Sequence coverage	emPAI	Description
MYH10_HUMAN	466	228858	26	26	18	0.07	0.45	Myosin-10 OS=Homo sapiens GN=MYH10 PE=1 SV=3
TBB6_HUMAN	66	49825	3	3	2	0.06	0.19	Tubulin beta-6 chain OS=Homo sapiens GN=TUBB6 PE=1 SV=1
PYC_HUMAN	54	129551	1	1	1	0.01	0.03	Pyruvate carboxylase, mitochondrial OS=Homo sapiens GN=PC PE=1 SV=2
COPA_HUMAN	44	138258	3	3	3	0.02	0.1	Coatomer subunit alpha OS=Homo sapiens GN=COPA PE=1 SV=2
FAS_HUMAN	42	273254	1	1	1	0	0.02	Fatty acid synthase OS=Homo sapiens GN=FASN PE=1 SV=3
MYL6_HUMAN	42	16919	2	2	2	0.14	0.67	Myosin light polypeptide 6 OS=Homo sapiens GN=MYL6 PE=1 SV=2
ADT1_HUMAN	40	33043	1	1	1	0.03	0.14	ADP/ATP translocase 1 OS=Homo sapiens GN=SLC25A4 PE=1 SV=4
RS16_HUMAN	33	16435	2	2	2	0.12	0.69	40S ribosomal protein S16 OS=Homo sapiens GN=RPS16 PE=1 SV=2
DDX58_HUMAN	31	106531	1	1	1	0.01	0.04	Probable ATP-dependent RNA helicase DDX58 OS=Homo sapiens GN=DDX58 PE=1 SV=2
CENPB_HUMAN	30	65132	2	2	2	0.03	0.15	Major centromere autoantigen B OS=Homo sapiens GN=CENPB PE=1 SV=2
CDKL1_HUMAN	29	41645	1	1	1	0.02	0.11	Cyclin-dependent kinase-like 1 OS=Homo sapiens GN=CDKL1 PE=1 SV=5
R51A2_HUMAN	27	133822	1	1	1	0.01	0.03	RAD51-associated protein 2 OS=Homo sapiens GN=RAD51AP2 PE=1 SV=1
3BHS7_HUMAN	26	40990	1	1	1	0.02	0.11	3 beta-hydroxysteroid dehydrogenase type 7 OS=Homo sapiens GN=HSD3B7 PE=1 SV=2
GRP75_HUMAN	26	73635	1	1	1	0.01	0.06	Stress-70 protein, mitochondrial OS=Homo sapiens GN=HSPA9 PE=1 SV=2
SPTN2_HUMAN	26	271157	1	1	1	0	0.02	Spectrin beta chain, non-erythrocytic 2 OS=Homo sapiens GN=SPTBN2 PE=1 SV=3
FLII_HUMAN	25	144659	1	1	1	0.01	0.03	Protein flightless-1 homolog OS=Homo sapiens GN=FLII PE=1 SV=2
OR1E3_HUMAN	25	38492	1	1	1	0.02	0.12	Olfactory receptor 1E3 OS=Homo sapiens GN=OR1E3 PE=3 SV=2

## Supplement Figure Legends

**Figure S1. Pam2-ODN treatment protects against infections in *Cgas* and *Sting* knockout mice and *Ifi204* heterozygous mice.** Survival of wild type or *Cgas*<sup>-/-</sup> mice challenged with (A) influenza A virus or (B) *P. aeruginosa* 24 h after nebulized treatment with PBS or Pam2ODN. Survival of wild type or *Sting*<sup>gt/gt</sup> mice challenged with (C) influenza A virus or (D) *P. aeruginosa* one day after nebulized treatment with PBS or Pam2ODN. Survival of wild type or *Ifi204*<sup>+/-</sup> mice challenged with (E) influenza A virus one day after nebulized treatment with PBS or Pam2ODN. \* p < 0.01 vs. PBS-treated syngeneic mice treated by log rank analysis.

**Figure S2. Identification of candidate ODN receptors.** (A) Streptavidin precipitation from lysates of HBEC3-kt cells treated as indicated were resolved by polyacrylamide gel electrophoresis and Coomassie stained. Boxes indicate bands excised for LC-MS analysis. (B) Euler diagram of LC-MS-identified proteins binding to ODN, biotinylated-ODN or both in A.

**Figure S3. Uncut blots from Figure 2.** (A) Uncut blot from Panel 4A. (B) Uncut blot from Panel 2B. (C) Uncut blots from Panel 2C, LI-COR fluorescent imaging for FITC-labeled ODN (*left*) and immunoblot for RIG-I (*right*). (D) Uncut blots from Panel 2D, LI-COR fluorescent imaging for FITC-labeled ODN (*left*) and immunoblot for RIG-I (*right*).

**Figure S4. RIG-I interaction with ODN is independent of RNA polymerase III.** (A) MLE-15 cells were pre-treated with PBS or RNA polymerase III inhibitor ML-60218 for 8 h, then 5s rRNA transcription was examined by qPCR. (B) MLE-15 cells were treated with PBS or ML-60218 for 8 h, then exposed to unlabeled ODN or 3' biotinylated-ODN for 2 h prior to streptavidin pulldown of RIG-I. (C) MLE-15 cells were exposed to unlabeled ODN or 5' or 3' biotinylated-ODN for 2 h prior to streptavidin pulldown of RIG-I. \* p < 0.0001 vs PBS-treated by two-way Student's t test.

**Figure S5. Uncut blots from Figure 4.**

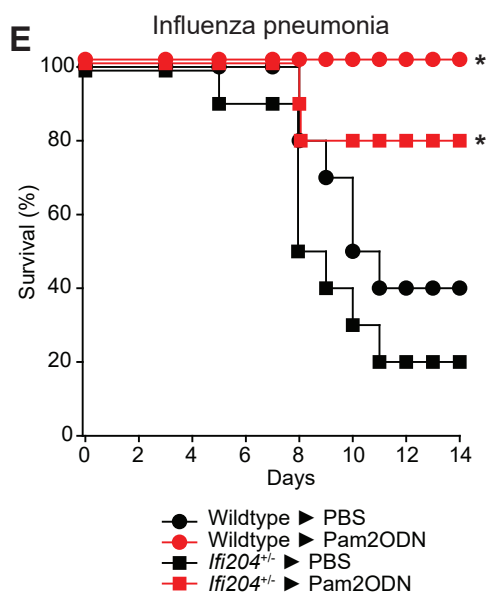
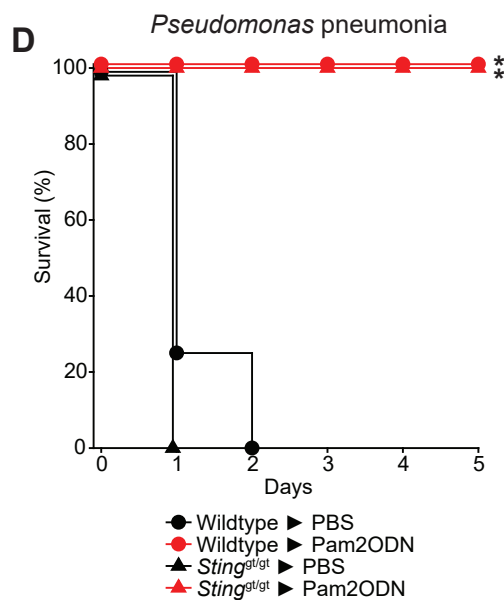
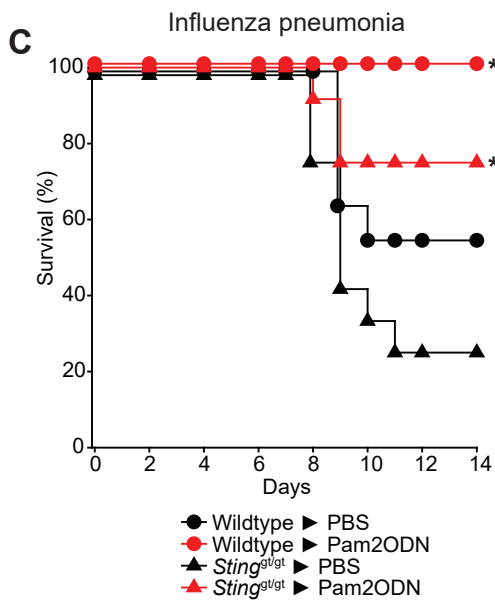
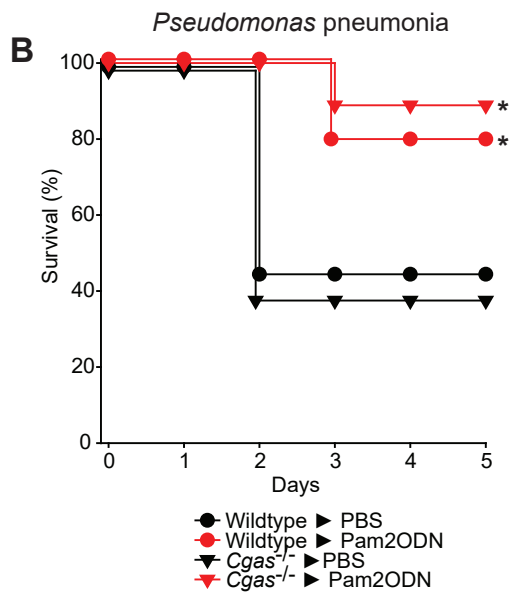
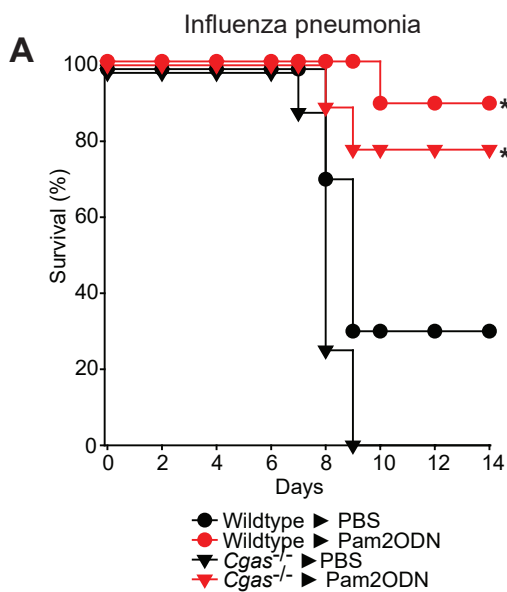
**Figure S6. MAVS aggregation upon RIG-I activation by RNA ligand or ODN.** HBEC3-KT cells were treated with a known RIG-I ligand 3p-hpRNA or ODN M362 for the indicated times, then examined by MAVS immunoblotting. The smears above the predicted MAVS band indicate MAVS aggregates. GAPDH was a loading control. 3p-hpRNA, 5' triphosphate hairpin RNA.

**Figure S7. Influenza A inoculum-dependent survival of wildtype, *Mavs* or *Tlr9* knockout mice.** Wildtype mice (A), *Tlr9*<sup>-/-</sup> mice (B) or *Mavs*<sup>-/-</sup> mice (C) were challenged with inhaled influenza A virus at the indicated inocula. Shown is survival after infection.

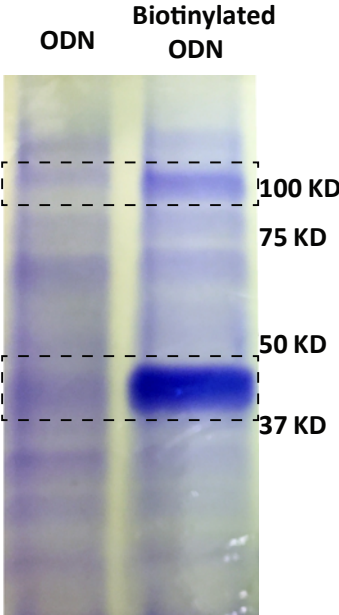
**Figure S8. Single ligand ODN treatment-induced *Cxcl10* expression and type I interferon production in mouse lungs.** *Cxcl10* gene expression in lung homogenates from wildtype or *Tlr9*<sup>-/-</sup>; *Mavs*<sup>-/-</sup> mice (A) or *MyD88*<sup>-/-</sup>; *Mavs*<sup>-/-</sup> mice (B) 4 h after nebulized PBS or ODN treatment, measured by qPCR. Interferon α1 (C) and β (D) in lung homogenates from wildtype or *Tlr9*<sup>-/-</sup>; *Mavs*<sup>-/-</sup> mice 24 h after nebulized PBS or ODN treatment, measured by ELISA. \* p < 0.02 vs PBS-treated wildtype by one-way ANOVA (Holm-Sidak method).

**Figure S9. RIG-I/ MAVS is not involved in mitochondrial ROS pathway in lung epithelial cells.** (A) MitoSOX fluorescence in HBEC3-KT RIG-I knockdown cells or scrambled shRNA control cells, shown 100 minutes after treatment with PBS (sham) or Pam2ODN. (B) Efficacy of MAVS shRNA knock down in HBEC3-KT cells was determined by immunoblotting. (C) MitoSOX fluorescence in HBEC3-KT MAVS knockdown cells or scrambled shRNA control cells, shown

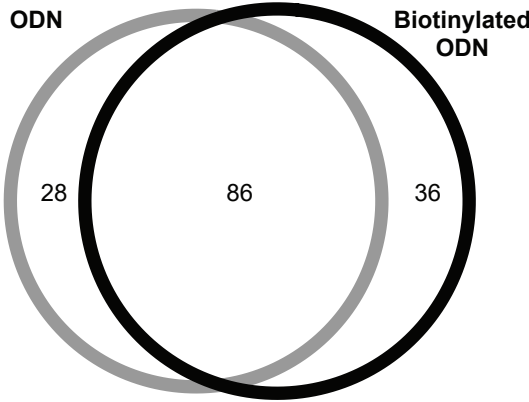
100 minutes after treatment with PBS or Pam2ODN. P values reflect intergroup analyses by one-way ANOVA (Holm-Sidak method).



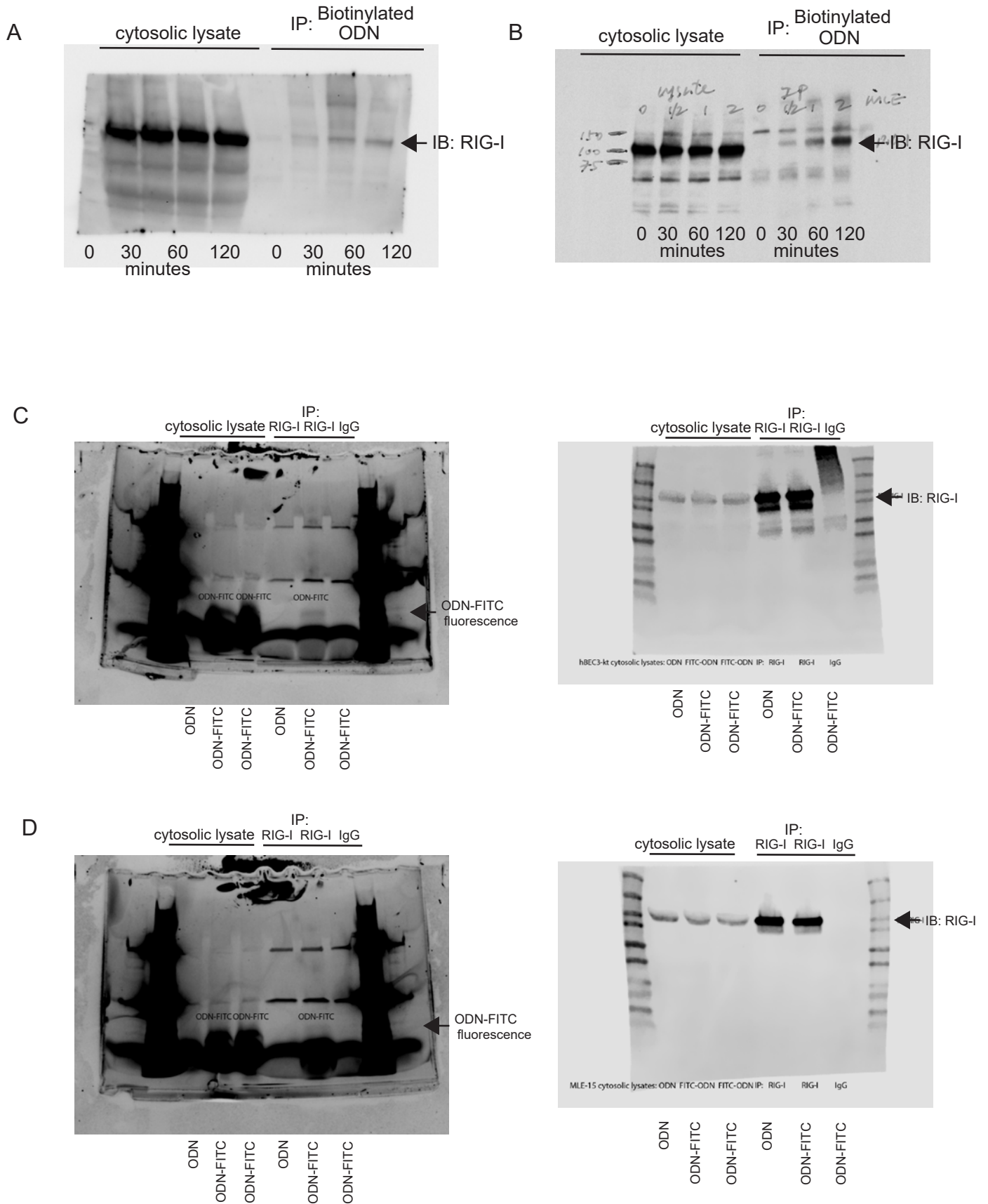
A



B

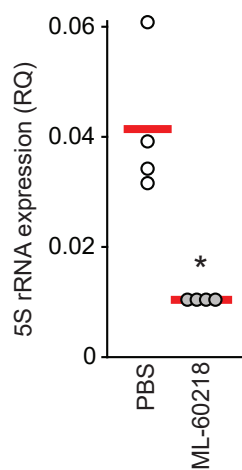


# Wang, Supplemental Figure S3

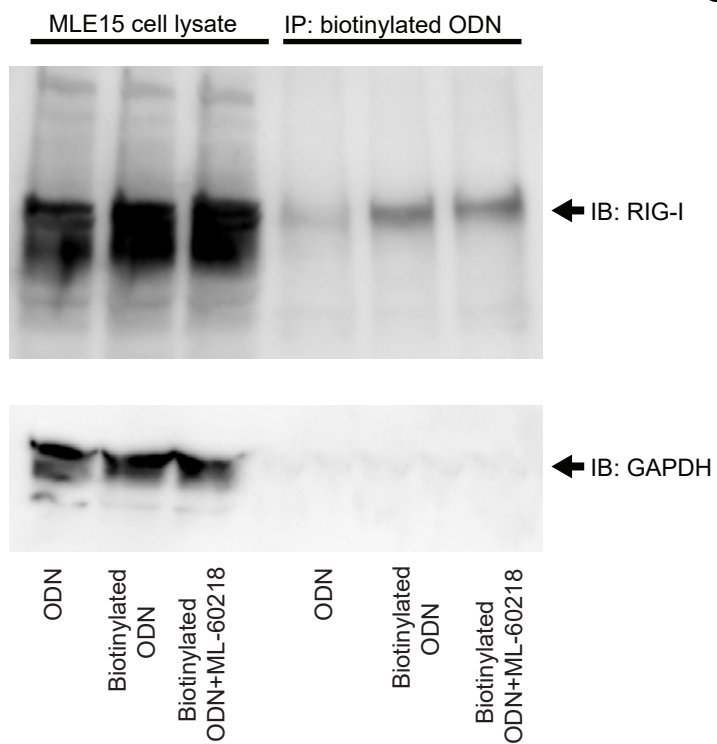


# Wang, Supplemental Figure S4

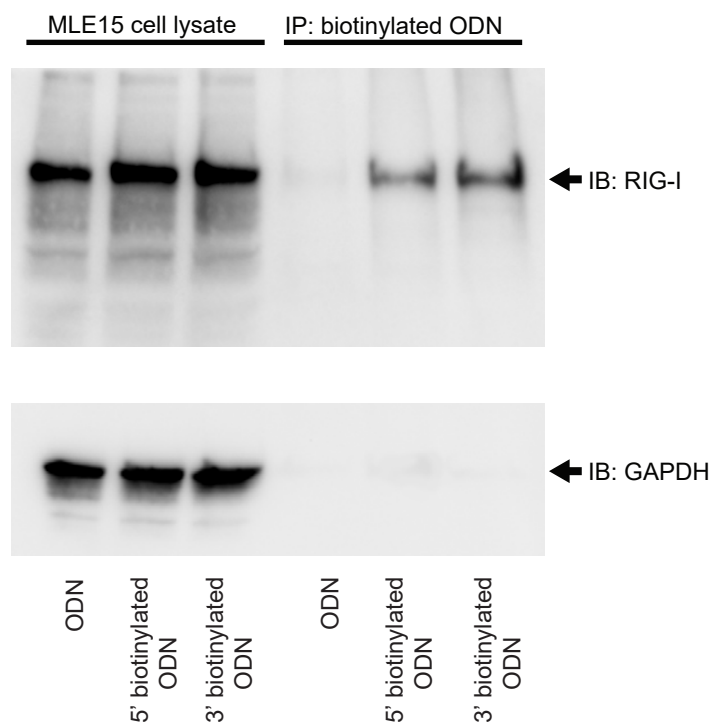
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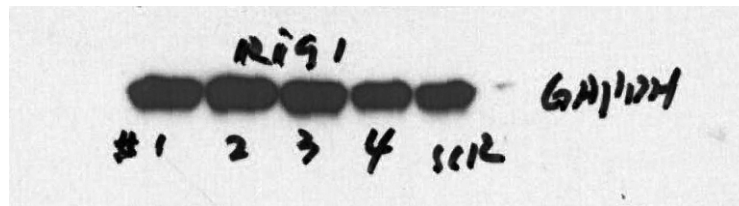
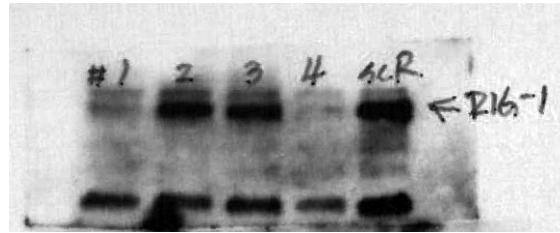
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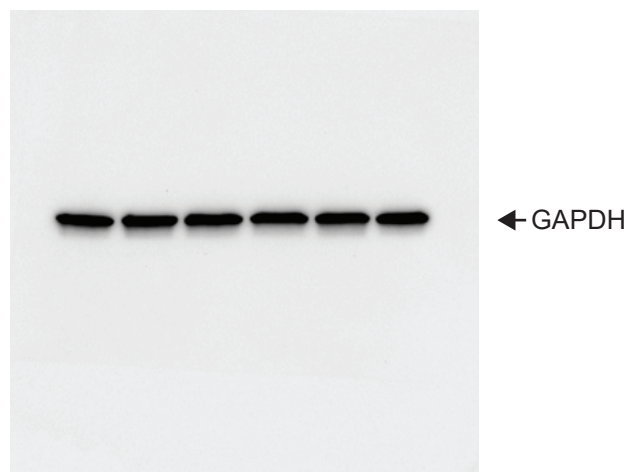
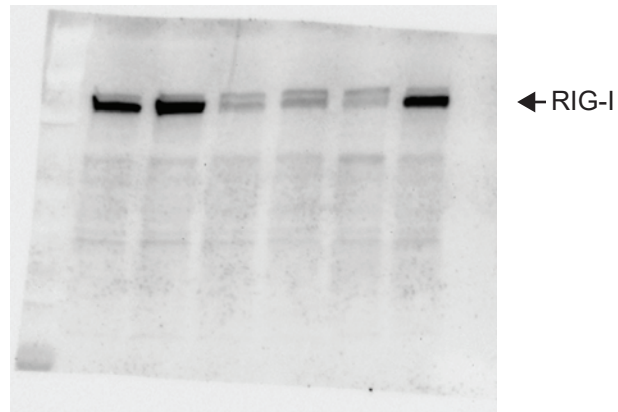
## C



# Wang, Supplemental Figure S5

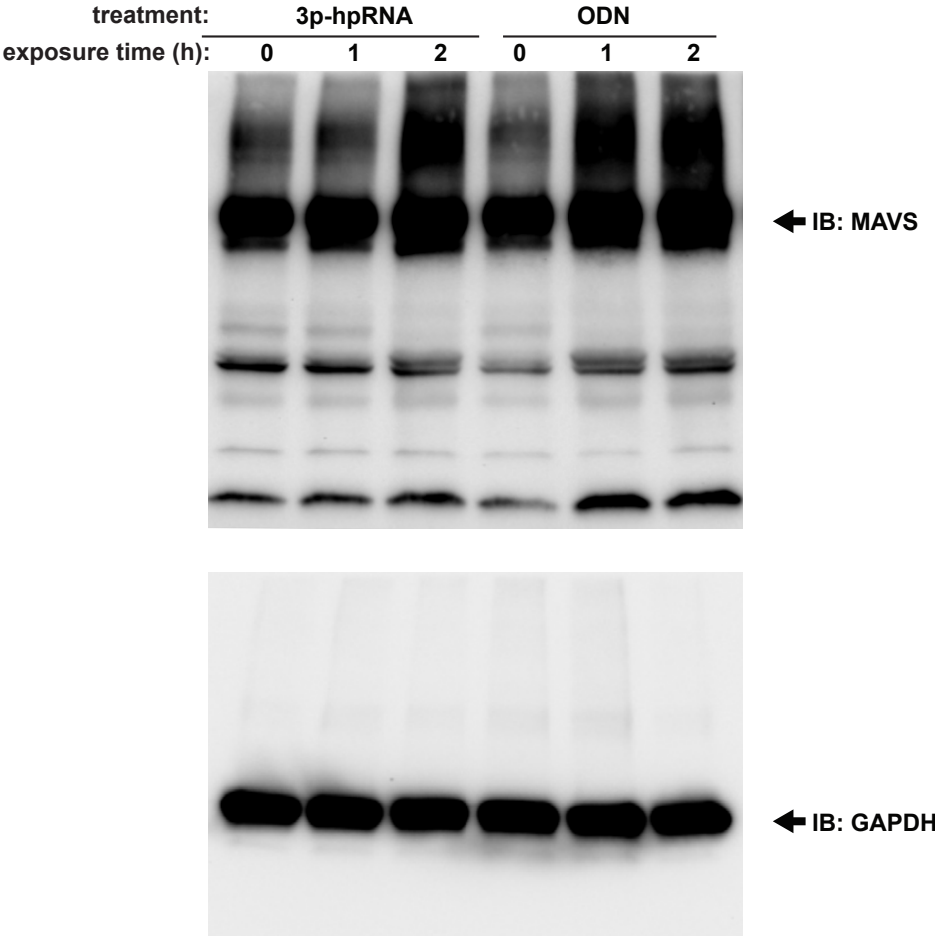


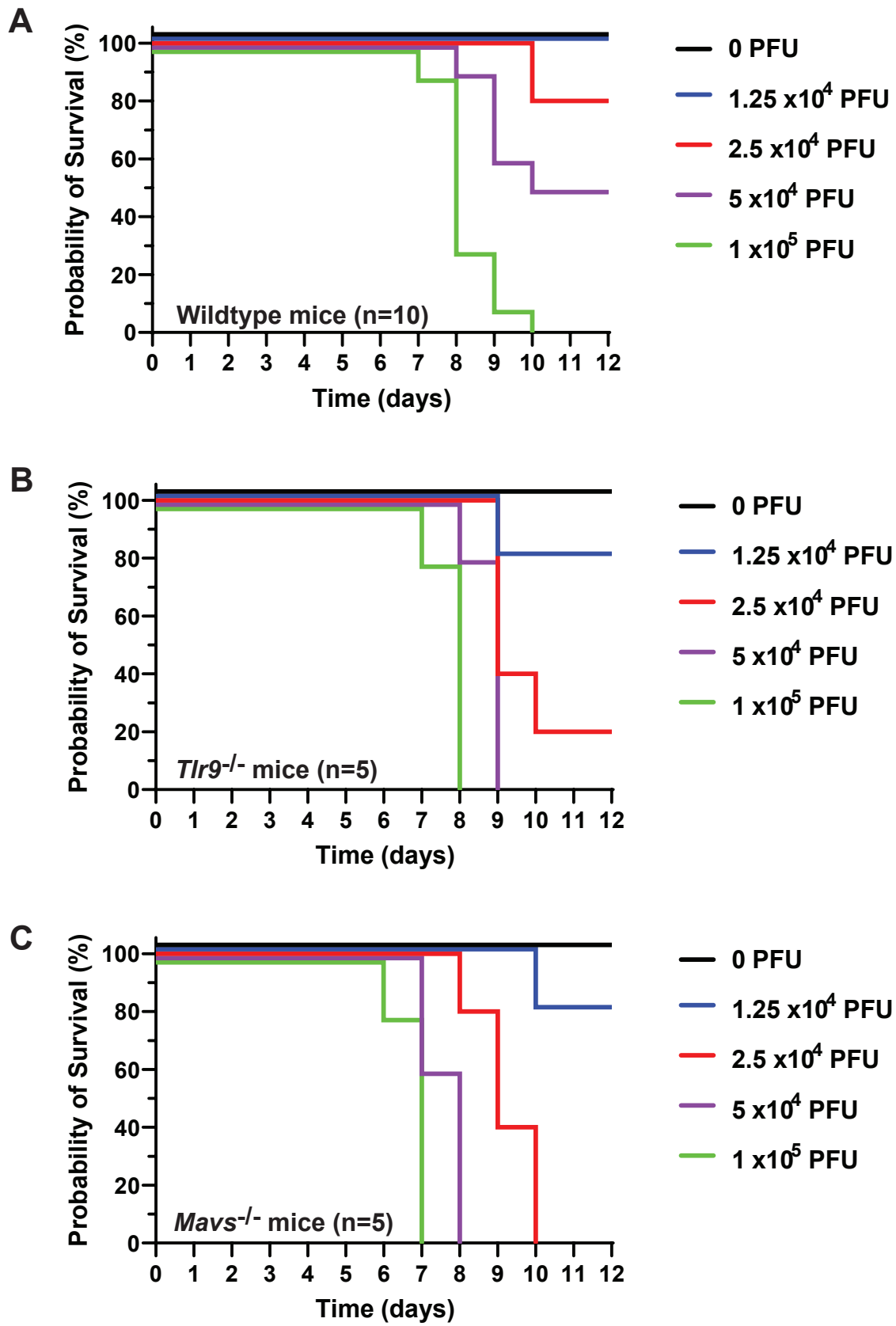
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Doxycycline:	-	+	-	+	-	+

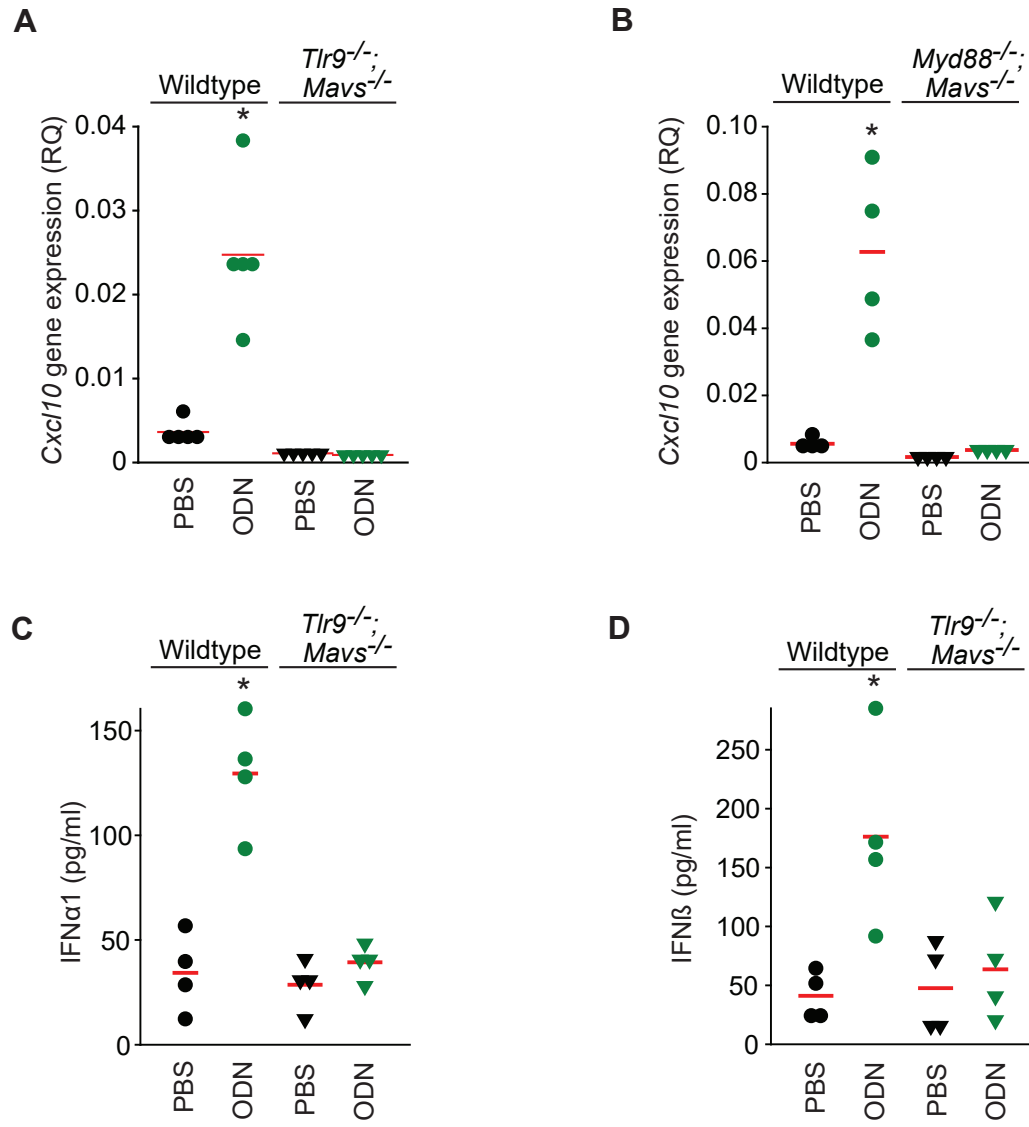




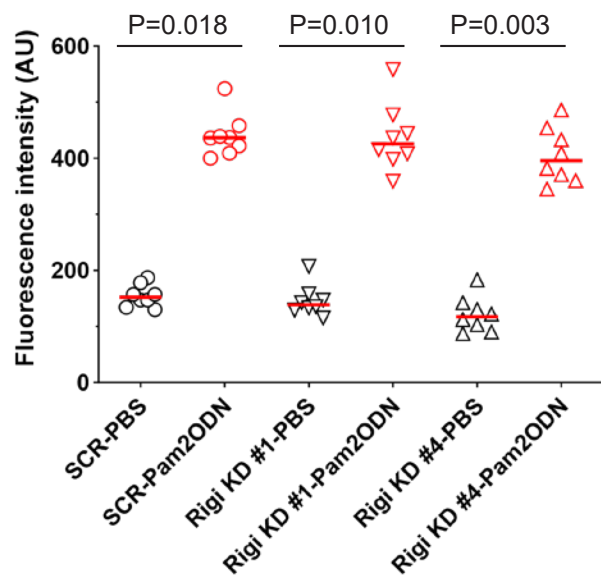
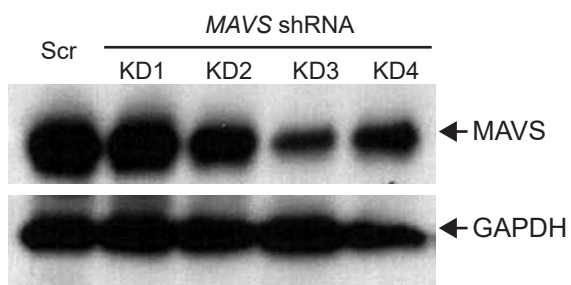
Wang, Supplemental Figure S6







# Wang, Supplemental Figure S9

**A****B****C**