Supplementary Data

Supplemental Tables

TABLE S1. Bacterial cell labeling efficiency experiment

	Dilution						
Strain	1:2	1:4	1:8	1:16	1:32	1:64	1:128
PgC	47462	23447.3	11695.1	5826.7	2818.3	1420.6	718.2
W50	38435	18613.3	9412	4634.7	2268	1147	575
W50/PgC	**80.9%**	**79.4%**	**80.5%**	**79.5%**	**80.5%**	**80.7%**	**80.1%**

The values were obtained after measuring the efficiency of FITC to label the WT W50 and capsule-deficient mutant PgC strains of bacteria. Serial dilutions of the labeled bacteria were made and the FITC values were recorded by a FluoStar Galaxy fluorescence plate reader (BMG Lab Technologies). Each bacteria dilution was run in triplicate and an average value was computed for each dilution factor. These averages were then converted to a ratio of W50/PgC to indicate the percentage of labeled W50 cells in relation to labeled PgC.

TABLE S2. Role of capsule in *P. gingivalis* virulence. Survival of bacteria in animals infected with 3×10^9 of encapsulated W50 and non-encapsulated PgC strains (1). Survival was determined by the number of colonies obtained following plating of sera/tissues derived from infected animals on blood agar plates. In the cases where there was too many colonies to count observed on plates a number 1000 was used. The duplicate columns for each strain designate numbers obtained from two plates.

Mice	Sample	W50		PgC		Control	
1	Blood #1	0	1	0	0	0	0
	Liver #1	0	0	0	0	0	0
	Abscess #1	0	60	4	0	0	0
	Spleen	0	0	0	0		
2	Blood #2	60	0	0	0	0	0
	Liver #2	1000	10	200	180	0	0
	Abscess #2					0	0
	Spleen	0	0	228	200		
3	Blood #3	96	108	0	0		
	Liver #3	26	30	0	0		
	Abscess #3						
	Spleen			126	100		
4	Blood #4			0	0		
	Liver #4	0	0	0	0		
	Abscess #4			1000	1000		
	Spleen			0	0		
5	Blood #5	194	202	0	0		
	Liver #5	240	200	0	0		
	Abscess #5						
	Spleen			0	0		
6	Blood #6	17	0	0	0		
	Liver #6	240	200	0	0		
	Abscess #6						
	Spleen			0	-		

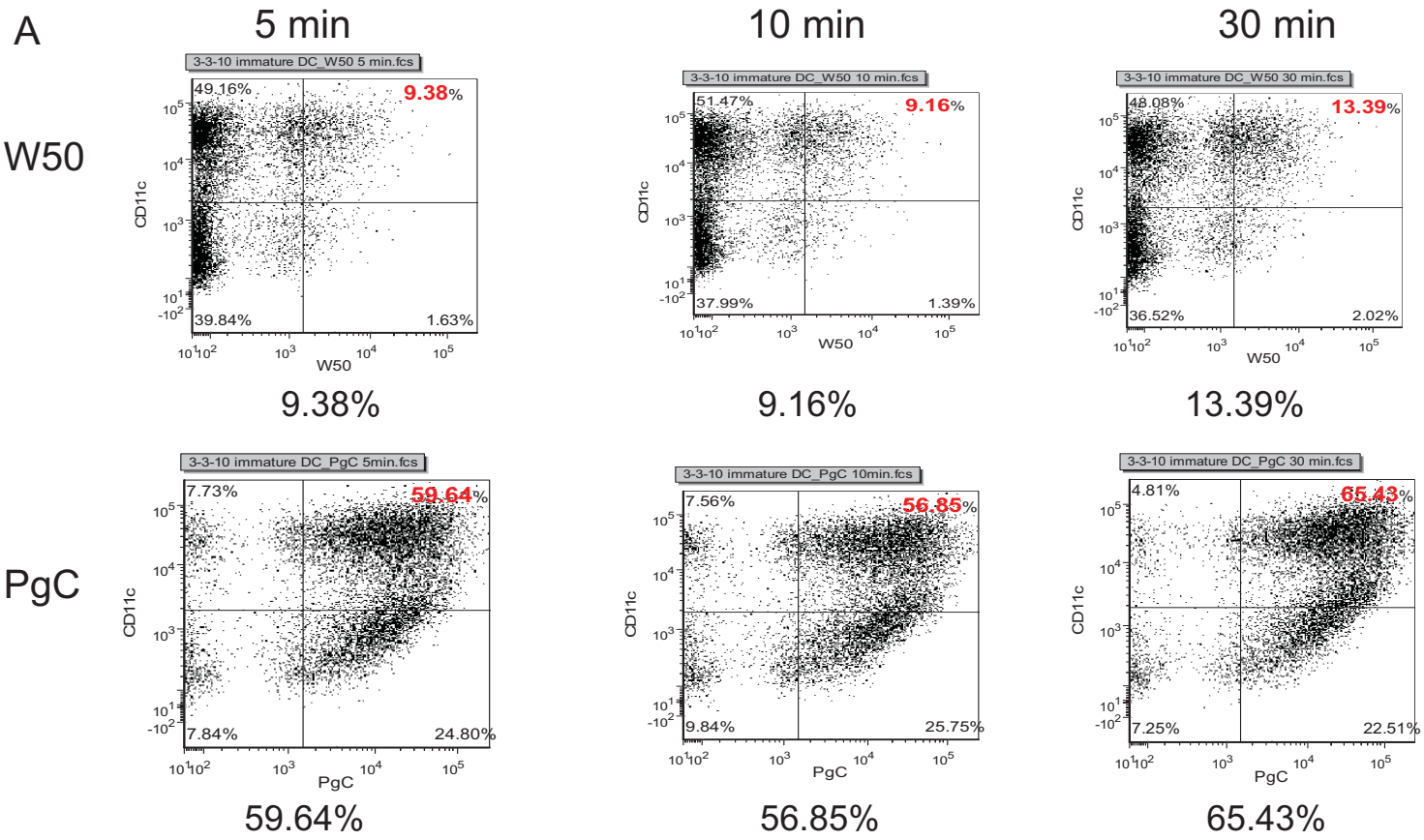
TABLE S3. Role of capsule in *P. gingivalis* virulence. Survival of bacteria in animals infected with 1×10^{10} of encapsulated W50 and non-encapsulated PgC strains (1). Survival was determined by the number of colonies obtained following plating of sera/tissues derived from infected animals on blood agar plates. In the cases where there was too many colonies to count observed on plates a number 1000 was used. The duplicate columns for each strain designate numbers obtained from two plates.

Mice	Sample	W50		PgC		Control	
1	Blood #1	0	0	0	0	0	0
	Liver #1	1000	1000	1000	1000	0	0
	Abscess #1	1000	1000	66	80	0	0
	Spleen	0	0	0	0		
2	Blood #2	0	0	0	0	0	0
	Liver #2	0	0	20	0	0	0
	Abscess #2	0	0	0	0	0	0
	Spleen						
3	Blood #3	0	0	30	22		
	Liver #3	0	0	232	210		
	Abscess #3	18	27	8	12		
	Spleen			126			
4	Blood #4	1000	1000	0	0		
	Liver #4	1000	1000	0	0		
	Abscess #4	1000	1000	6	8		
	Spleen	0	0				
5	Blood #5	22	0	0	0		
	Liver #5	10	30	6	0		
	Abscess #5	1000	1000	25	30		
	Spleen			0	0		
6	Blood #6	39	32	30	50		
	Liver #6	88	74	0	0		
	Abscess #6	1000	1000	0	0		
	Spleen						
7	Blood #7	0	0				
	Liver #7	14	0				
	Abscess #7	1000	1000				
	Spleen#7						

TABLE S4. Survival of bacteria in animals infected with 3×10^{10} of encapsulated W83 and non-encapsulated EPS strains (10). Survival was determined by the number of colonies obtained following plating of sera/tissues derived from infected animals on blood agar plates. In the cases where there was too many colonies to count observed on plates a number 1000 was used. The duplicate columns for each strain designate numbers obtained from two plates.

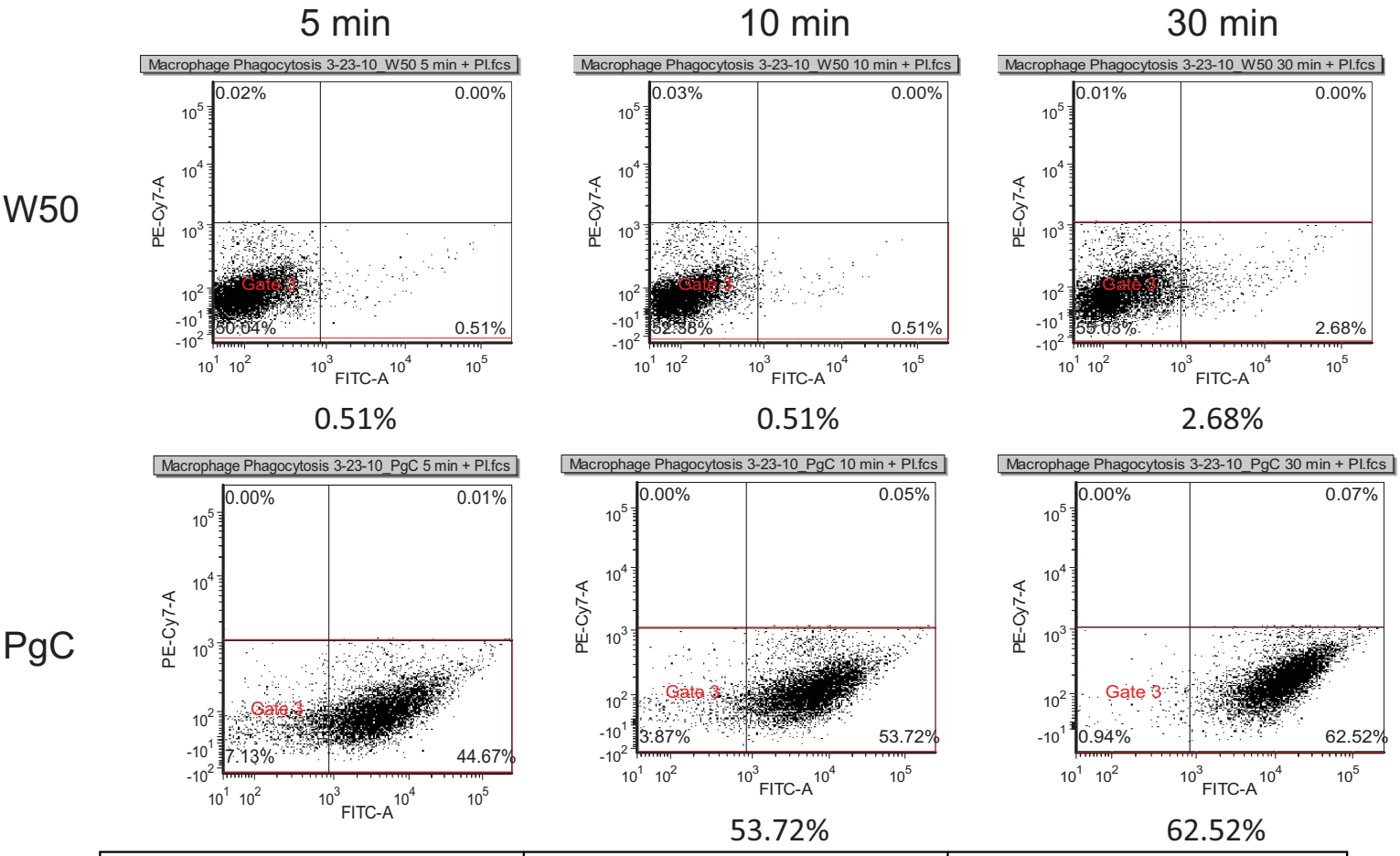
Mice	Sample	W83		EpsC Mutant		Control	
1	Blood #1	0	0	0	0	0	0
	Liver #1	80	100	50	0	0	0
	Abscess #1	50	1000	0	1	0	0
2	Blood #2	0	0	0	0	0	0
	Liver #2	0	0	0	0	0	0
	Abscess #2	1000	1000	0	0	0	0
3	Blood #3	1000	1000	0	0		
	Liver #3	1000	1000	0	0		
	Abscess #3	1000	1000	0	0		
4	Blood #4	0	0	0	0		
	Liver #4	0	0	30	21		
	Abscess #4	1000	1000	60	75		
5	Blood #5	1000	1000	0	0		
	Liver #5	1000	1000	16	22		
	Abscess #5	1000	1000	0	0		
6	Blood #6	100	100	0	0		
	Liver #6	0	0	0	0		
	Abscess #6	0	0	0	0		
7	Blood #7	1000	1000	10	8		
	Liver #7	1000	1000	1000	200		
	Abscess #7	1000	1000	98	109		

A



Incubation Time	PgC Positive Dendritic Cells	W50 Positive Dendritic Cells
5 minutes	47.7%	9.4%
10 minutes	45.5%	9.2%
30 minutes	52.3%	13.4%

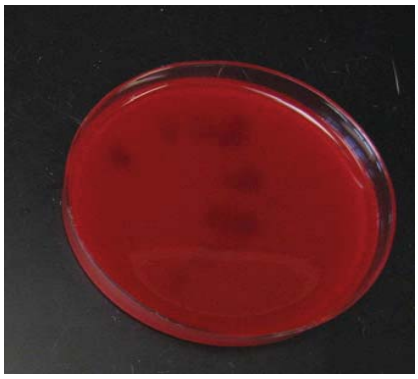
Fig. S1A. Phagocytosis by dendritic cells



Incubation Time	PgC Positive Macrophages	W50 Positive Macrophages
5 minutes	35.8%	0.51%
10 minutes	43.0%	0.51%
30 minutes	50.0%	2.68%

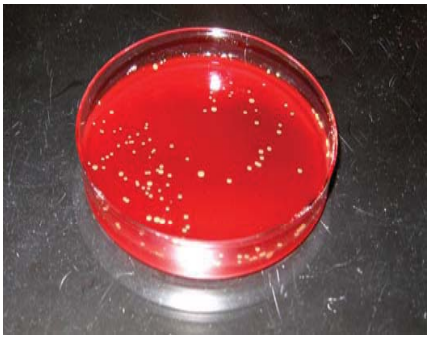
Fig. S1B. Phagocytosis by macrophages

W50 1/10 dilution



PgC 1/10 dilution

Figure S2A. Survival results for dendritic cells



W50 1/4 dilution

PgC 1/4 dilution

Figure S2B. Survival results for macrophages

A

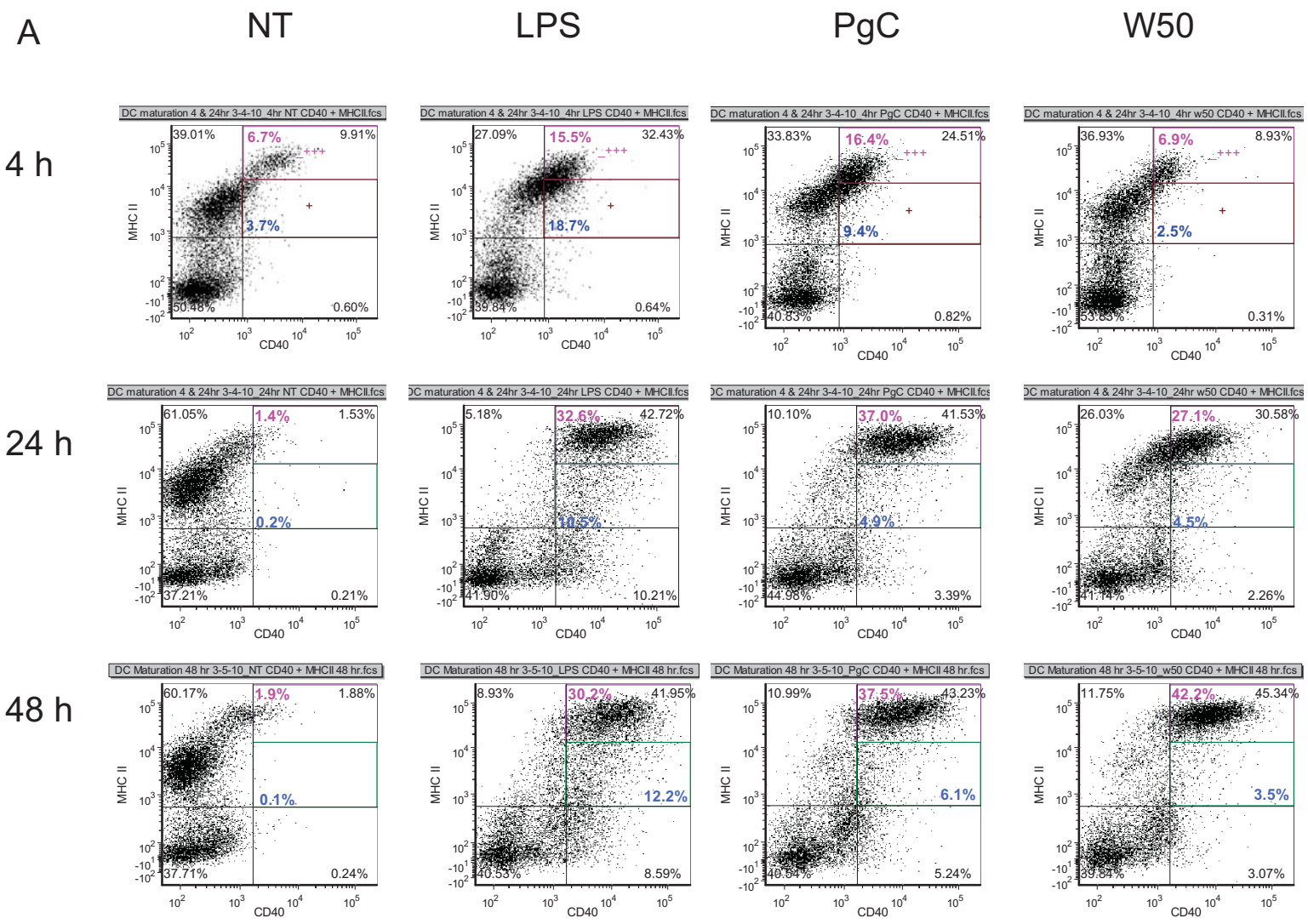


Fig. S3A. Maturation of dendritic cells

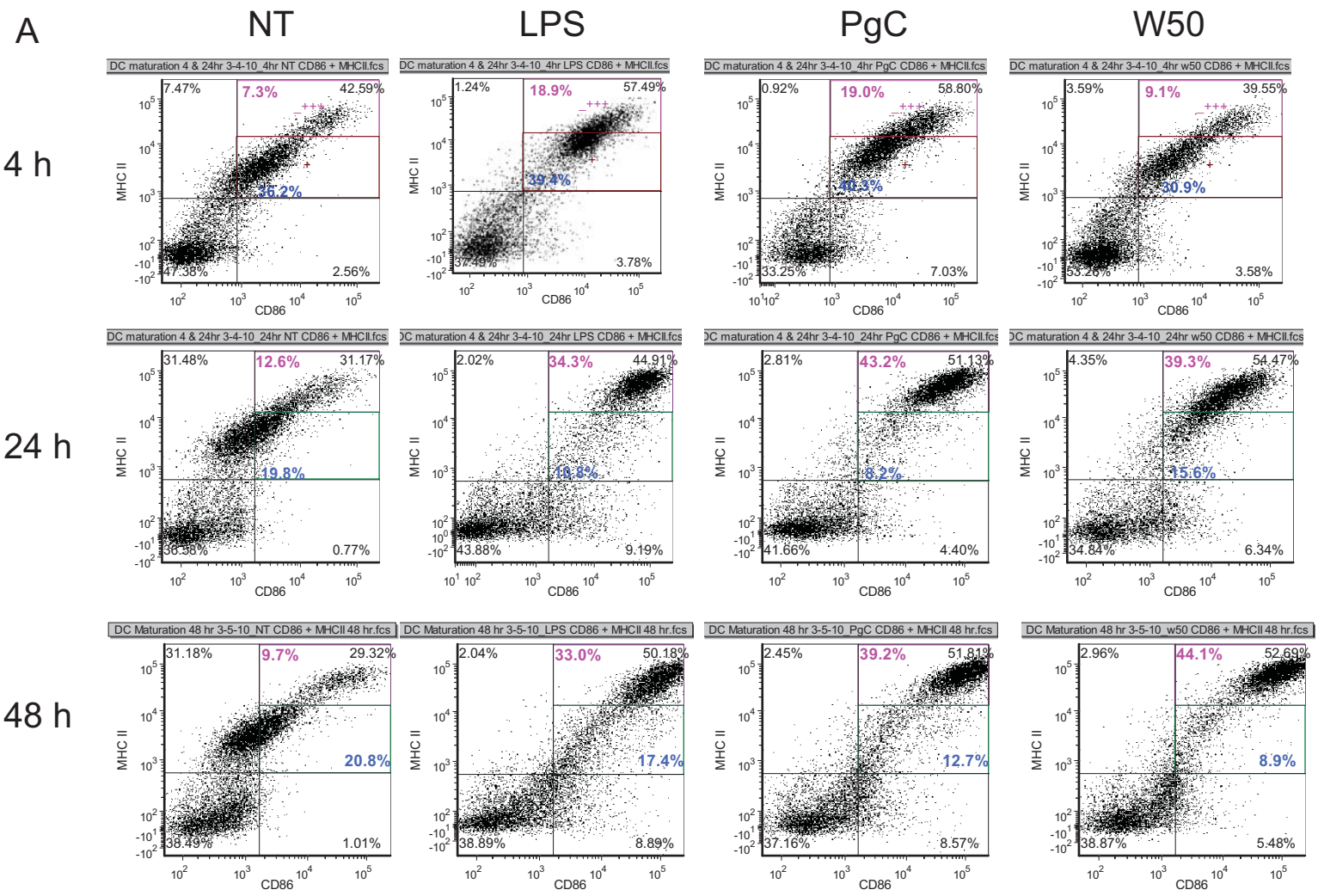


Fig. S3B. Maturation of dendritic cells

DC Treatment	Maturation Marker	4 hrs	24 hrs	48 hrs
No treatment (NT) (negative control)	CD11c + MHC II	7.9%	12.5%	11.5%
	CD40 + MHC II	6.7%	1.4%	1.9%
	CD86 + MHC II	7.3%	12.6%	9.7%
LPS (positive control)	CD11c+ MHC II	21.8%	31.6%	28.3%
	CD40 + MHC II	15.5%	32.6%	30.2%
	CD86 + MHC II	18.9%	34.3%	33.0%
PgC (mutant bacteria)	CD11c+ MHC II	18.6%	40.1%	39.3%
	CD40 + MHC II	16.4%	37.0%	37.5%
	CD86 + MHC II	19.0%	43.2%	39.2%
W50 (wild-type bacteria)	CD11c+ MHC II	10.4%	39.6%	42.4%
	CD40 + MHC II	6.9%	27.1%	42.2%
	CD86 + MHC II	9.1%	39.3%	44.1%

Fig S3C. Maturation of dendritic cells - summary