

Interaction studies reveal specific recognition of an anti-inflammatory polyphosphorhydrazone dendrimer by human monocytes

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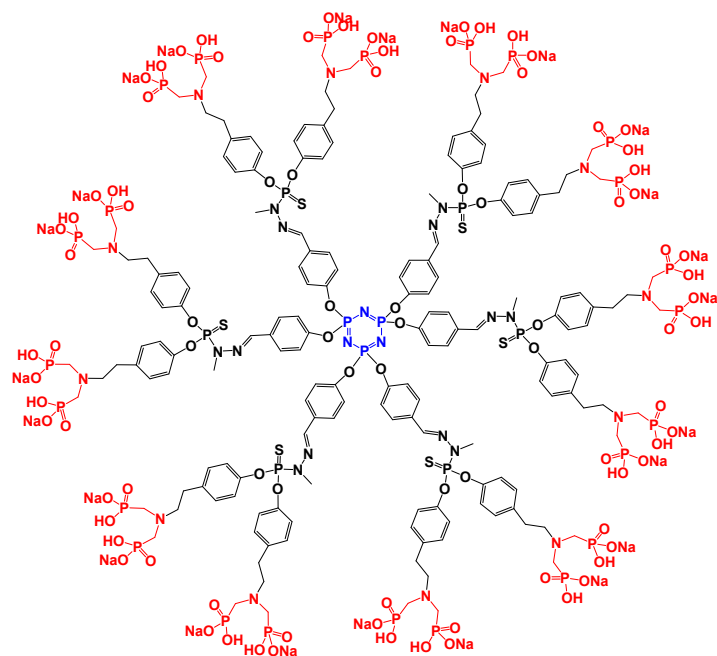
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(a)



(b)

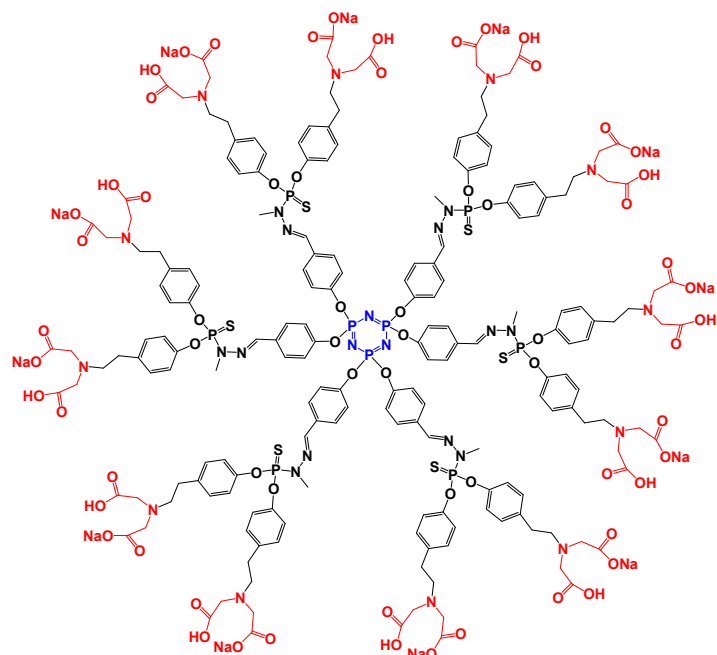


Fig. S1 Two-dimensional structures of (a) dendrimer 1 (ABP) and (b) dendrimer 2 (ABC).

Table S1

Main transition calorimetric data^[a] for MLV suspensions of pure DPPC (30 mM) alone, and with dendrimers **1**, **2**, **6** or **9** (3 mM).

	Scan number	T _m (°C)	ΔH ^[b]
MLV alone	1 st	40.99	-8.87
	4 th	41.04	-8.96
MLV + 1	1 st	41.03	-7.48
	4 th	41.05	-7.48
MLV + 6	1 st	41.01	-7.24
	4 th	41.02	-7.38
MLV + 2	1 st	41.06	-7.31
	4 th	41.10	-7.47
MLV + 9	1 st	40.90	-7.33
	4 th	40.97	-7.47

[a] Values are given for heating cycles. Cooling cycles gave comparable absolute values. [b] ΔH: transition enthalpy normalized per mole of DPPC. Unit is kcal.mol⁻¹.

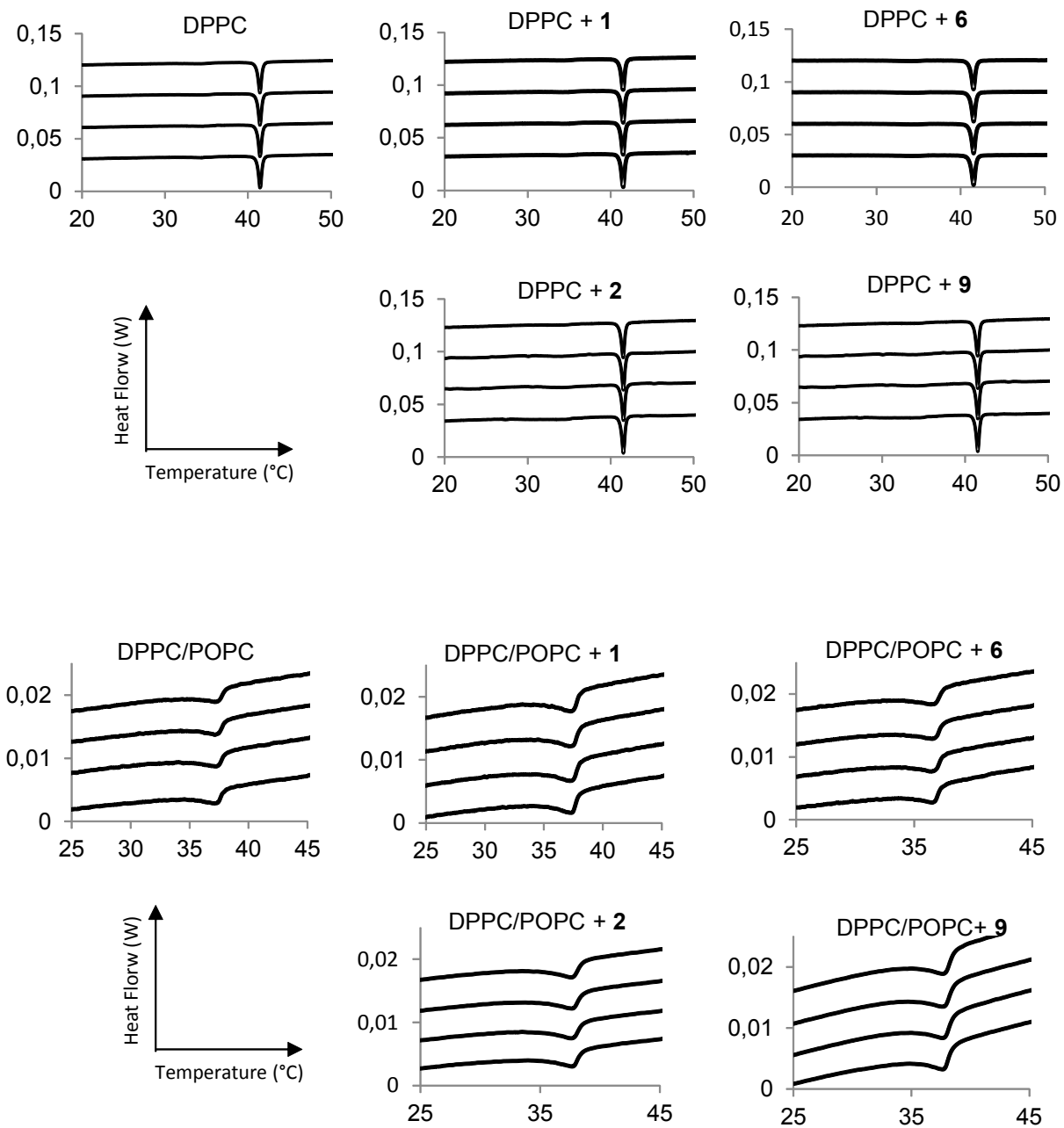


Fig. S2 DSC scans for pure DPPC and DPPC/POPC (30 mM) MLV suspensions in the presence of dendrimers **1**, **2**, **6** or **9** (3 mM).

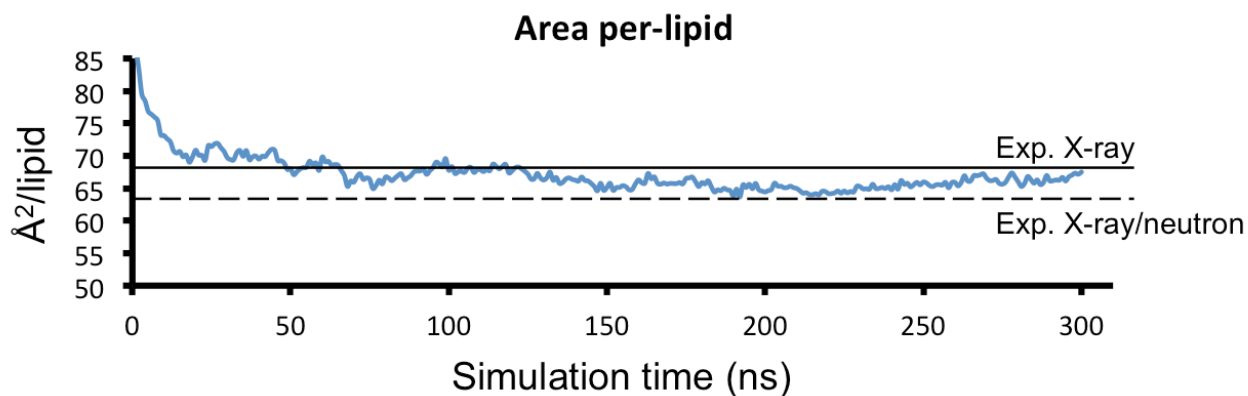


Fig. S3 Area per lipid for the POPC model extracted from the MD simulation as a function of simulation time. The simulation data (blue) is in good agreement with the experimental results (dotted and solid black lines).^{1,2}

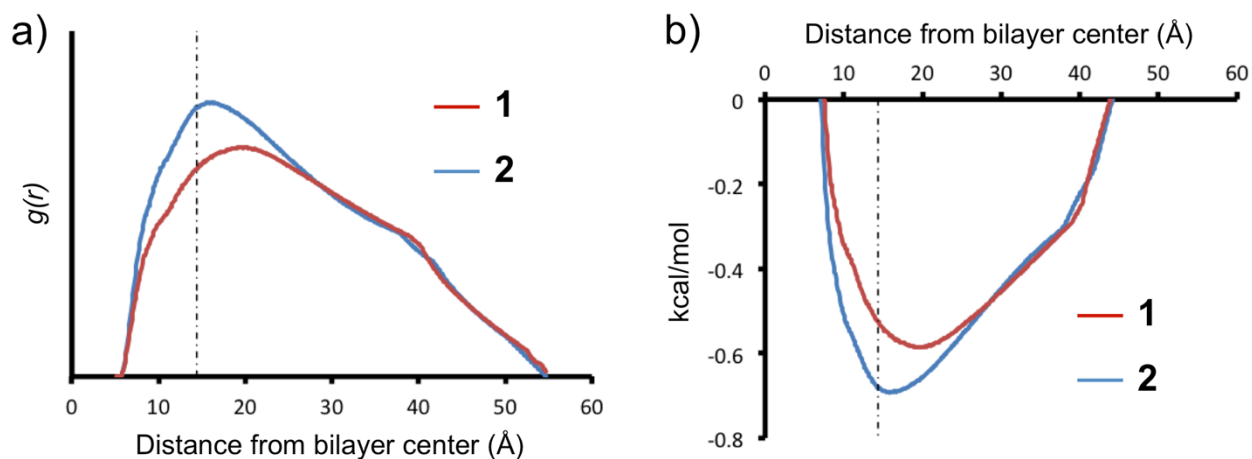


Fig. S4 Dendrimers absorption onto the POPC membrane. (a) Radial distribution functions of the centres of mass of dendrimers **1** (red) and **2** (blue) calculated respect to the lipid bilayer centre (origin of the x axis). (b) Free energy of absorption (ΔA) extracted from the $g(r)$ data as $A = -kT \ln(g(r))$.³⁻⁵ The dotted lines identify the lipid bilayer surface (centres of mass of the lipid heads).

References

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