?2-glycoprotein I (apolipoprotein H) modulates uptake and endocytosis associated chemiluminescence in rat Kupffer cells

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?2-Glycoprotein I (?2GPI) is known to influence macrophage uptake of particles with phosphatidylserine containing surfaces, as apoptotic thymocytes and unilamellar vesicles in vitro. Nevertheless, effects upon macrophage activation induced by this interaction are still unknown. ?2GPI influence upon the reactive species production by Kupffer cells was evaluted in order to investigate whether ?2GPI modulates the macrophage response to negatively charged surfaces. Chemiluminescence of isolated non-parenchymal rat liver cells was measured after phagocytosis of opsonized zymosan or phorbolmyristate acetate (PMA) stimulation, in the presence and absence of large unilamellar vesicles (LUVs) containing 25 mol% phosphatidylserine (PS) or 50 mol% cardiolipin (CL) and complementary molar ratio of phosphatidylcholine (PC). ?2GPI decreased by 50% the chemiluminescence response induced by opsonized zymosan, with a 66% reduction of the initial light emission rate. PMA stimulated Kupffer cell chemilum