

Keywords and Phrases for Phagocytosis.

acidification of the phagosome

also releases antibacterial peptides such as defensins and cathelicidin

IgG, IgE, C3b, C4b, mannose-binding lectin (MBL), C-reactive protein (CRP)

increased metabolic and microbicidal activity of the phagocyte

inflammatory mediators such as bacterial products, complement proteins, inflammatory cytokines, and prostaglandins

large numbers of microorganisms are present, high levels of inflammatory cytokines and chemokines are produced, or phagocytes are binding to cells too large to be engulfed

lysosomes containing beta-defensins, lysozyme, lactoferrin, cathepsin G, elastase, bactericidal permeability increasing protein, other digestive enzymes

lysosomes fuse with the phagosomes containing the ingested microbes and the microbes are destroyed

movement of phagocytes toward an increasing concentration of some attractant

PAMPs bind to endocytic pattern-recognition receptors

PAMPs, DAMPs, C5a, chemokines, kinins, blood clotting products

polymerization and depolymerization of actin filaments send pseudopods out to engulf the microbe and place it in an endocytic vesicle called a phagosome

produce surface endocytic PRRs to bind PAMPs for unenhanced attachment

superoxide anion, hydrogen peroxide, hydroxyl radicals, hypochlorous acid, peroxynitrite radicals

the pH is correct for the acid hydrolases to effectively break down cellular proteins