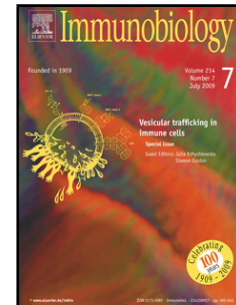


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**Involvement of Caspase-4 in IL-1 beta Production and Pyroptosis in Human Macrophages  
During Dengue Virus Infection**

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Caspase-4 physically interacts with caspase-1 and is believed to be a proinflammatory caspase that can induce the inflammatory form of programmed cell death (pyroptosis) and the release of mature interleukin (IL)-1 $\beta$ . However, the function of caspase-4 is not yet fully understood. We examined the function of caspase-4 in IL-1 $\beta$  production and pyroptosis during dengue virus serotype-2 (DENV-2) infection in human macrophages. In this study, DENV-2 infection increased IL-1 $\beta$  protein level with activated caspase-4 activity. Using primary macrophages, we observed that caspase-4 induces activation of caspase-1 and secretion of IL-1 $\beta$  in response to DENV-2 infection, without the need for secondary signals to stimulate the assembly of the

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