Supporting Information

Palm and Medzhitov 10.1073/pnas.1221476110

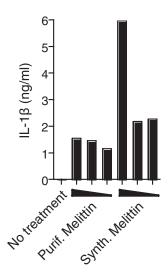


Fig. S1. Synthetic melittin induces IL-1 β secretion by LPS-treated macrophages. Bone-marrow-derived macrophages were treated with LPS for 4 h before stimulation with melittin purified from bee venom (3.1, 1.56, 0.78 μ g/mL) or synthetically produced melittin (3.1, 1.56, 0.78 μ g/mL) for 1 h. IL-1 β secretion was measured by ELISA.

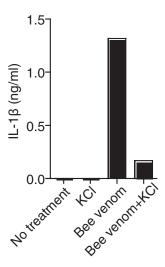


Fig. S2. High extracellular potassium blocks bee-venom-induced IL-1 β secretion. Bone-marrow-derived macrophages incubated with or without additional KCI (50 mM) were treated with LPS for 4 h before stimulation with bee venom (12.5 μ g/mL) for 1 h. IL-1 β secretion was measured by ELISA.

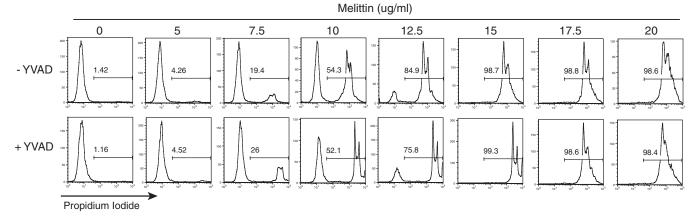


Fig. S3. Caspase-1 does not protect against melittin-induced cell death in Chinese hamster ovary cells. Chinese hamster ovary cells that were or were not pretreated for 1 h with the caspase-1 inhibitor Z-Tyr-Val-Ala-Asp(OMe)-fluoromethylketone (100 μM) were treated with titrating doses of melittin. Cell death was measured by propidium iodide staining of cells 3 h after melittin treatment.

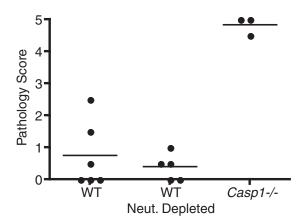


Fig. S4. Neutrophil depletion does not affect formation of necrotic lesions after s.c. injection with Western Diamondback venom. WT mice, neutrophildepleted mice, and $Casp1^{-/-}$ mice were injected s.c. with Western Diamondback venom (65 μ g) and necrotic lesions were scored on day 5 after injection. Mice were depleted of neutrophils using the depleting antibody RB6-8C5 (0.2 mg intraperitoneally every 24 h starting 1 d before injection with venom).

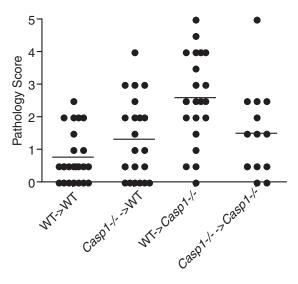


Fig. S5. Caspase-1 in nonhematopoietic cells enhances resistance to s.c. injection with Western Diamondback venom. Radiation bone marrow chimeras between WT and $Casp 1^{-/-}$ mice (donor \rightarrow recipient) were constructed by i.v. injection of 10 million donor bone marrow cells into irradiated recipients (900 rads). After 8 wk of reconstitution, mice were injected s.c. with Western Diamondback venom (65 μ g) and necrotic lesions were scored on day 5 after injection.