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On the cover: Model of butyrophilin (BTN)3A1 composed of an IgV/IgC extracellular dimer, a B30.2 intracellular dimer, and a model of the proposed intracellular juxtamembrane coiled-coil dimer. The binding of (*E*)-4-hydroxy-3-methyl-but-2-enyl pyrophosphate produced by microbes (left) and endogenous isopentenyl pyrophosphate (right) to the B30.2 domain leads to activation of human V γ 2V δ 2 T cells. Models of coiled-coil homodimers for human BTN3A1, BTN3A2, and BTN3A3 and for alpaca and dolphin BTN3A3 are shown from top to bottom on extreme left. Wang, H., M. H. Nada, Y. Tanaka, S. Sakuraba, and C. T. Morita. 2019. Critical roles for coiled-coil dimers of butyrophilin 3A1 in the sensing of prenyl pyrophosphates by human V γ 2V δ 2 T cells. *J. Immunol.* 203: 607–626.

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