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Cover photograph (Copyright © 2009, American Society for Microbiology. All Rights Reserved.): Composite image of the cytoskeletal organization in wild-type (top) and dematin headpiece knockout (HPKO) (bottom) mouse embryonic fibroblasts that were plated over a 3-hour time course. Both actin organization (red) and β -tubulin organization (green) in the dematin HPKO fibroblasts are disrupted and show abnormal membrane protrusions, increased stress fiber formation, and defects in motility and adhesion. RhoA activation in the dematin HPKO fibroblasts was significantly elevated in comparison to that in wild-type cells, suggesting that dematin functions as a suppressor of RhoA signaling. (See related article in August 2008, vol. 28, no. 15, p. 4712.)