The Philosophy of Molecular Biology of the Cell

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Note that MBoC places a premium on research articles that present conceptual advances of wide interest or deep mechanistic understanding of important cellular processes. As such, articles dealing principally with describing behavior or modification of specific transcription factors, or analysis of the promoter elements through which they interact, will not generally be considered unless accompanied by information supporting in vivo relevance or broad significance.

Septins are small GTPases that localize in a filamentous pattern in cells. Treatment of cultured human podocytes with cytochalasin D disrupts the filamentous organization of the actin cytoskeleton, as visualized by phalloidin staining (red). In cytochalasin D–treated podocytes the normally linear septin 7 filaments (green) curl and form ring-like structures, indicating that septin 7 localization depends on an intact actin cytoskeleton. The nucleus is visualized with DAPI (blue). Septin 7 may participate in the regulation of glucose transport in podocytes. See the article by Wasik et al. on p. 3370 of this issue of MBoC. (Image: Anita A. Wasik, University of Helsinki, Finland)