



Proteasomal degradation resolves competition between cell polarization and cellular wound healing

Dr. Keiko Kono

Associate Professor
Department of Cell Biology
Nagoya City University, Graduate School of
Medical Sciences and Medical School



Maintaining the integrity of barrier structures between internal cells and the external environment is critical for every single organism. Here we define mechanisms for budding yeast to mount a membrane wound healing response after laser damage. Protein Kinase C-dependent proteasomal degradation of polarity factors releases cytoskeletal proteins and signaling molecules from the emerging bud, enabling their recruitment to the wound. Proteolysis is essential, preventing competition between the wound and the site of polarized growth. Mechanisms to overcome competition from a preexisting polarized cytoskeleton may be a general feature of effective wound healing in polarized cells.

(Ref. Kono et al., Cell 150:151-164, 2012)

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Department of Pathology and Biology of Diseases
Michiyuki Matsuda ext. 4421

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