

T H E
PLANT
C E L L

Volume 20 Number 5 May 2008

The electronic form of this issue, available at www.plantcell.org, is the journal of record.

ON THE COVER



The plastid-localized methylerythritol phosphate (MEP) pathway synthesizes the isoprenoid precursors of essential photosynthesis-related compounds and hormones. Flores-Pérez et al. (pages 1303–1315) report on the *Arabidopsis* mutant *rif1* (*resistant to inhibition by FSM*), which has a lesion in a GTPase homolog required for ribosome assembly and plastid protein synthesis. As shown on the cover, the *rif1* mutant grows in the presence of the MEP pathway inhibitor fosmidomycin, which causes a developmental block and severe albino phenotype in the wild type. The authors show that the mutant has increased levels of the first two enzymes of the MEP pathway, resulting from their decreased degradation in mutant plastids, and that the stromal Clp protease complex is involved in this process. The results suggest that plastidial isoprenoid biosynthesis is finely adjusted by regulating the degradation of MEP pathway enzymes.

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Printed in the United States of America.

The Plant Cell (ISSN 1040-4651, online ISSN 1531-298X) is published monthly (one volume per year) by the American Society of Plant Biologists, 15501 Monona Drive, Rockville, MD 20855-2768, and is produced by Dartmouth Journal Services, Waterbury, VT. The institutional price for the print and online versions is based on type of institution; contact institution@aspb.org. A subscription includes both *The Plant Cell* and *Plant Physiology*; single copies may be purchased for \$75 each, plus \$7 shipping (U.S.) or \$9 (outside U.S.). Members of the American Society of Plant Biologists may subscribe to *The Plant Cell* for \$160. Nonmember individuals may subscribe for \$325. For matters regarding subscriptions, contact Suzanne Cholwek, ASPB, 15501 Monona Drive, Rockville, MD 20855-2768; telephone 301/251-0560, ext. 141; fax 301/251-6740; e-mail scholwek@aspb.org. Notify ASPB in writing within 3 months (domestic) or 6 months (foreign) of issue date, and defective copies or copies lost in the mail will be replaced. Send all inquiries regarding display advertising to FASEB AdNet, 9650 Rockville Pike, Bethesda, MD 20814-3998; telephone 301/634-7791; fax 301/634-7153; e-mail adnet@faseb.org. Periodicals postage paid at Rockville, MD 20850, and at additional mailing offices.

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