



HAL
open science

Transcriptional and functional classification of the GOLVEN/ROOT GROWTH FACTOR/CLE-like signaling peptides reveals their role in lateral root and hair formation

Ana Fernandez, Andrzej Drozdzecki, Kurt Hoogewijs, , Tom Beeckman,
Annemieke Madder, Pierre Hilson

► To cite this version:

Ana Fernandez, Andrzej Drozdzecki, Kurt Hoogewijs, , Tom Beeckman, et al.. Transcriptional and functional classification of the GOLVEN/ROOT GROWTH FACTOR/CLE-like signaling peptides reveals their role in lateral root and hair formation. *Plant Physiology*, 2013, 161 (2), pp.954-970. 10.1104/pp.112.206029 . hal-01190620

HAL Id: hal-01190620

<https://hal.science/hal-01190620>

Submitted on 29 May 2020

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

Supplemental Data

The following materials are available in the online version of this article.

Supplemental Table S1. *GLV* primers for amplification of promoter sequences.

Supplemental Table S2. Transcript levels in *GLV* mutant lines.

Supplemental Table S3. *GLV* primers for amplification of open reading frame sequences.

Supplemental Table S4. Synthetic peptides.

Supplemental Table S5. Odds ratio estimates of root tip angle distribution.

Supplemental Movie S1. Expression of *GLV4* in the root epidermal cells. The molecular marker was *GLV4pro::NLS-2xGFP*. The movie pauses every time a nucleus with GFP signal is reached. At the end, a summary of all cells where the GFP signal appeared is shown. Roots were counterstained with PI (red).

Supplemental Movie S2. Expression of *GLV8* in the root cortical and non-hair epidermal cells. The molecular marker was *GLV8pro::NLS-GFP-GUS*. The movie pauses every time a nucleus with GFP signal is reached. At the end, a summary of all cells where the GFP signal appeared is shown. Notice that one cortical and 2 non-hairs cells at the right side lack GFP signal because they only appear late and therefore their nucleus is not reached. Roots were counterstained with PI (red).