Name: *35S::CKX2*

Accessions: H4

Map position:

Gene function: cytokinin oxidase

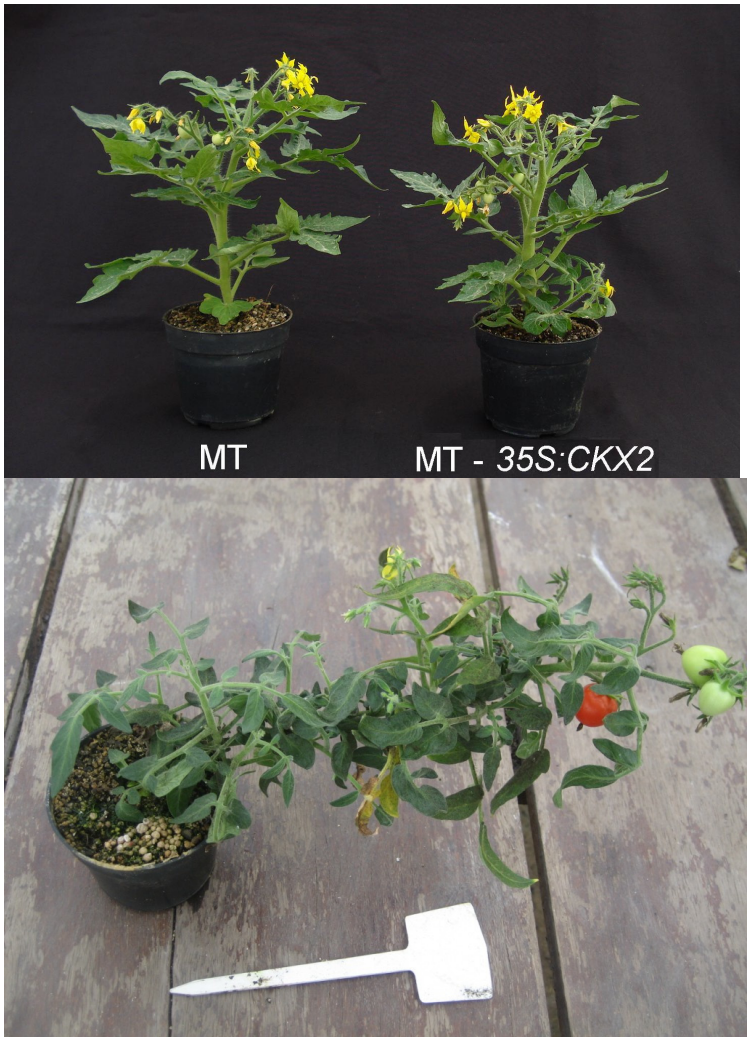
Gene effect: transgenic plant has low endogenous levels of cytokinin.

Phenotypes: MT-*35S::CKX2* plants have excessive branching in roots and shoots. Leaves are smaller and leaflets are smooth-edged (not dentate in margins). Shoots and leaves seem to lack long trichomes, resembling the *hair absent* mutant (*h*). Seeds take longer to germinate. The plants are resistant to kanamycin, which is the selectable maker in the vector used.

Comments:

Description of accessions available: MT-*35S::CKX2* is a transgenic plant with constitutive expression of the gene CKX2 from Arabidopsis. The vector construct was a gift from Dr. Thomas Schmulling (Berlin University).

Figures:



MT-*35S::CKX2* (right and below) showing excessive branching.

Bibliography

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Werner T, Motyka V, Laucou V, Smets R, Van Onckelen H, Schmülling T (2003) Cytokinin-deficient transgenic Arabidopsis plants show multiple developmental alterations indicating opposite functions of cytokinins in the regulation of shoot and root meristem activity. Plant Cell 15:2532-2550.