

Name: *35S::asCCD7*

Accessions: H20

Map position:

Gene function: *CCD7/MAX3* is a carotenoid cleavage dioxygenase from the strigolactone biosynthesis pathway

Gene effect: Transgenic plants have reduced strigolactone levels.

Phenotypes: As a consequence of low strigolactone production, MT-*CCD7* is high branched in shoots and defective for mycorrhiza colonization in roots. The plants are resistant to kanamycin, which is the selectable marker in the vector used.

Comments:

Description of accessions available: MT-*CCD7* is a BC6Fn. The first transgenic plants with this construct were produced in cv M82 by Dr. Harry Klee.

Figures:

Bibliography

Vogel JT, Walter MH, Giavalisco P, Lytovchenko A, Kohlen W, Charnikhova T, Simkin AJ, Goulet C, Strack D, Bouwmeester HJ, Fernie AR, Klee HJ (2010) *S/CCD7* controls strigolactone biosynthesis, shoot branching and mycorrhiza-induced apocarotenoid formation in tomato. *Plant Journal* 61:300–311.

Koltai H, LekKala SP, Bhattacharya C, Mayzlish-Gati E, Resnick N, Winer S, Dor E, Yoneyama K, Yoneyama K, Hershenhorn J, Joel DM, Kapulnik Y (2010) Tomato strigolactone-impaired mutant displays aberrant shoot morphology and plant interactions. *Journal of Experimental Botany* 61:1739–1749.