Name: Delta carotene (Del)

Accessions: OC5

Gene ID: Solyc12g008980

Map position: chromosome 12 (Short arm)

Gene function: *lycopene* ε -*cylclase* (*CrtL-e* or *Lcy-e*)

Gene effect: Plants with the dominant *Del* allele convert lycopene to δ -(delta)-

carotene in fruits.

Phenotypes: MT-*Del* has a reddish-orange mature fruit color.

Comments:

Description of accessions available: MT-Del is a BC6Fn introgressed from Solanum

pennellii LA716

Figures:



MT-Del fruits.

Bibliography

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Ronen G, Cohen M, Zamir D, Hirschberg J (1999) Regulation of carotenoid biosynthesis during tomato fruit development: expression of the gene for lycopene epsilon-cyclase is down-regulated during ripening and is elevated in the mutant delta. Plant Journal 17: 341–351

Tomes ML (1963) Temperature inhibition of carotene synthesis in tomato. Botanical Gazette 124:180-185.

Tomes ML (1967) The competitive effect of beta-and delta-carotene genes on alphaand beta-ionone ring formation in the tomato. Genetics 56:227–231

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