

**Name:** *white flower (wf)*

**Accessions:** OC4

**Gene ID:** Solyc03g007960

**Map position:** chromosome 3 (short arm).

**Gene function:** chromoplast-specific beta-carotene hydroxylase (*CrtR-B2*).

**Gene effect:** plants with the mutated allele present white flowers due to the low xanthophylls (Neoxanthin and Violaxanthin) content of the corolla.

**Phenotypes:** Corolla color is buff, light tan or white

**Comments:**

**Description of accessions available:** MT-*wf* is a BC6Fn introgressed from LA0159.

**Figures:**



MT-*wf* (right) showing white corolla color as compared with the control MT (left).

### **Bibliography**

Galpaz N, Ronen G, Khalfa Z, Zamir D, Hirschberg J (2006) A chromoplast-specific carotenoid biosynthesis pathway is revealed by cloning of the tomato white-flower locus. *Plant cell* 18: 1947-1960.

D'Ambrosio C, Stigliani AL, Giorio G (2011) Overexpression of *CrtR-b2* (carotene beta hydroxylase 2) from *S. lycopersicum* L. differentially affects xanthophyll synthesis and accumulation in transgenic tomato plants. *Transgenic Research* 20:47-60.