

# Protein LUTEIN DEFICIENT 5, chloroplastic (CYP97A3), Recombinant Protein

Cat      *RP08437*

---

## Species

*Arabidopsis thaliana* (Mouse-ear cress)

## Full Product Name

Recombinant *Arabidopsis thaliana* Protein LUTEIN DEFICIENT 5, chloroplastic (CYP97A3) , partial

## Product Gene Name

CYP97A3 recombinant protein

## Product Synonym Gene Name

CYP97A3

## Purity

Greater or equal to 85% purity as determined by SDS-PAGE. (lot specific)

## Format

Lyophilized or liquid (Format to be determined during the manufacturing process)

## Host

E Coli or Yeast or Baculovirus or Mammalian Cell

## Molecular Weight

66,846 Da

## Storage

Store at -20°C. For long-term storage, store at -20°C or -80°C. Store working aliquots at 4°C for up to one week. Repeated freezing and thawing is not recommended.

## Protein Family

Protein LUTEIN DEFICIENT

## NCBI Accession #

NP\_564384.1

## NCBI GI #

18398119

## NCBI GenBank Nucleotide #

NM\_102914.3

## NCBI GeneID

840067

## NCBI Official Full Name

cytochrome P450, family 97, subfamily A, polypeptide 3

## NCBI Official Symbol

CYP97A3

---

**FOR RESEARCH OR FURTHER MANUFACTURING USE ONLY**

---

# Protein LUTEIN DEFICIENT 5, chloroplastic (CYP97A3), Recombinant Protein

Cat      *RP08437*

---

## NCBI Official Synonym Symbols

"cytochrome P450; cytochrome P450; F5M6.19; F5M6\_19; family 97; LUT5; LUTEIN DEFICIENT 5; polypeptide 3; polypeptide 3"; subfamily A

## NCBI Protein Information

cytochrome P450, family 97, subfamily A, polypeptide 3

## NCBI Summary

Encodes a protein with beta-ring carotenoid hydroxylase activity.

## UniProt Gene Name

CYP97A3

## UniProt Synonym Gene Names

LUT5

## UniProt Protein Name

Protein LUTEIN DEFICIENT 5, chloroplastic

## UniProt Synonym Protein Names

Cytochrome P450 97A3

## UniProt Primary Accession #

Q93VK5

## UniProt Secondary Accession #

Q9C6S0

## UniProt Related Accession #

Q93VK5

## UniProt Comments

Heme-containing cytochrome P450 involved in the biosynthesis of xanthophylls. Specific for beta-ring hydroxylation of alpha- and beta-carotene. Has also a low activity toward the epsilon-rings of alpha-carotene. The beta-ring of alpha-carotene is the preferred substrate in planta.

---

**FOR RESEARCH OR FURTHER MANUFACTURING USE ONLY**