

Transcription factor GLABRA 3 (GL3), Recombinant Protein

Cat *RP00338*

Species

Arabidopsis thaliana (Mouse-ear cress)

Full Product Name

Recombinant *Arabidopsis thaliana* Transcription factor GLABRA 3 (GL3) , partial

Product Gene Name

GL3 recombinant protein

Product Synonym Gene Name

GL3

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

70,539 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

Transcription factor

NCBI Accession

NP_680372.1

NCBI GI

22327493

NCBI GenBank Nucleotide

NM_148067.4

NCBI GeneID

834133

NCBI Official Full Name

basic helix-loop-helix (bHLH) DNA-binding superfamily protein

NCBI Official Symbol

GL3

NCBI Official Synonym Symbols

FOR RESEARCH OR FURTHER MANUFACTURING USE ONLY

Transcription factor GLABRA 3 (GL3), Recombinant Protein

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GLABRA 3; GLABROUS 3; MYC6.2

NCBI Protein Information

basic helix-loop-helix (bHLH) DNA-binding superfamily protein

NCBI Summary

encodes a basic helix loop helix domain protein that interacts with GL1 in trichome development.

UniProt Gene Name

GL3

UniProt Synonym Gene Names

BHLH1; EN31; MYC6; SST; AtMYC6; AtbHLH1; bHLH 1

UniProt Protein Name

Transcription factor GLABRA 3

UniProt Synonym Protein Names

Basic helix-loop-helix protein 1; AtMYC6; AtbHLH1; bHLH 1; Protein SHAPESHIFTER; Transcription factor EN 31; bHLH transcription factor bHLH001

UniProt Primary Accession

Q9FN69

UniProt Related Accession

Q9FN69

UniProt Comments

Transcription activator, when associated with MYB75/PAP1, MYB90/PAP2 or TT2. Involved in epidermal cell fate specification. Regulates negatively stomata formation, but, in association with TTG1 and MYB0/GL1, promotes trichome formation, branching and endoreplication. Regulates also trichome cell wall maturation. Together with MYB66/WER, promotes the formation of non-hair cells in root epidermis cells in the N position. Whereas together with CPC, promotes the formation of hair cells in root epidermis cells in the H position by inhibiting non-hair cell formation. Seems also to play a role in the activation of anthocyanin biosynthesis, probably together with MYB75/PAP1. Activates the transcription of GL2.

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