

GEPHE SUMMARY

Gephebase Gene
VvMYBA1

Entry Status
Published

GepheID
GP00001194

Main curator
Martin

PHENOTYPIC CHANGE

Trait Category
Morphology

Trait
Coloration (fruit)

Trait State in Taxon A
Vitis vinifera - white-skinned cultivar - VvmybA1a allele

Trait State in Taxon B
Vitis vinifera - red-skinned cultivar - VvmybA1b allele

Ancestral State
Taxon A

Taxonomic Status
Domesticated

Taxon A

Latin Name
Vitis vinifera

Common Name
wine grape

Synonyms
Vitis vinifera subsp. vinifera; wine grape; Vitis vinifera L.

Rank
species

Lineage
cellular organisms; Eukaryota; Viridiplantae; Streptophyta; Streptophytina; Embryophyta; Tracheophyta; Euphyllophyta; Spermatophyta; Magnoliophyta; Mesangiospermae; eudicotyledons; Gunneridae; Pentapetalae; rosids; rosids incertae sedis; Vitales; Vitaceae; Viteae; Vitis

Parent
Vitis () - (Rank: genus)

NCBI Taxonomy ID
29760

is Taxon A an Intraspecies?
No

Taxon B

Latin Name
Vitis vinifera

Common Name
wine grape

Synonyms
Vitis vinifera subsp. vinifera; wine grape; Vitis vinifera L.

Rank
species

Lineage
cellular organisms; Eukaryota; Viridiplantae; Streptophyta; Streptophytina; Embryophyta; Tracheophyta; Euphyllophyta; Spermatophyta; Magnoliophyta; Mesangiospermae; eudicotyledons; Gunneridae; Pentapetalae; rosids; rosids incertae sedis; Vitales; Vitaceae; Viteae; Vitis

Parent
Vitis () - (Rank: genus)

NCBI Taxonomy ID
29760

is Taxon B an Intraspecies?
Yes

Taxon B Description
cv. "Ruby Okuyama" and cv. "Flame Muscat"

GENOTYPIC CHANGE

Generic Gene Name
VvmybA1

Synonyms
mybA; MybA3; mybA1; VVMYBA1; VvmybA3; MYBA1; VIT_02s0033g00410

String
29760.VIT_02s0033g00410.t01

Sequence Similarities
-

GO - Molecular Function
GO:0003677 : DNA binding

GO - Biological Process
-

GO - Cellular Component
GO:0005634 : nucleus

Presumptive Null

UniProtKB *Vitis vinifera*
Q6L973

GenebankID or UniProtKB
FN596505

No

Molecular Type

Cis-regulatory

Aberration Type

Deletion

Deletion Size

1-10 kb

Molecular Details of the Mutation

Gret1 retrotransposon deletion; leaving behind its 3'-LTR flanked by 5 bp of a duplicated target site

Experimental Evidence

Candidate Gene

Main Reference

Retrotransposon-induced mutations in grape skin color. (2004)

Authors

Kobayashi S; Goto-Yamamoto N; Hirochika H

Abstract

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Additional References

Structural dynamics at the berry colour locus in *Vitis vinifera* L. somatic variants . (2014)

RELATED GEPHE

Related Genes

3 (VvMybA1 VvMybA2 VvMybA3 and VvMybA4, VvMYBA2, VvMYBA3)

Related Haplotypes

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EXTERNAL LINKS

COMMENTS

@TE