

## GEPHE SUMMARY

	Gephebase Gene		GepheID
para (kdr) ( <a +para+(kdr)+"#gephebase-summary-title"="" href="https://www.gephebase.org/search-criteria?/and+Gene+Gephebase=">https://www.gephebase.org/search-criteria?/and+Gene+Gephebase="+para+(kdr)+"#gephebase-summary-title</a> )		GP00002551	Main curator
Published	Entry Status	Courtier	

## PHENOTYPIC CHANGE

	Trait Category		
Physiology ( <a +physiology+"#gephebase-summary-title"="" href="https://www.gephebase.org/search-criteria?/and+Trait+Category=">https://www.gephebase.org/search-criteria?/and+Trait+Category="+Physiology+"#gephebase-summary-title</a> )			
	Trait		
Xenobiotic resistance (insecticide) ( <a +xenobiotic+resistance+(insecticide)+"#gephebase-summary-title"="" href="https://www.gephebase.org/search-criteria?/and+Trait=">https://www.gephebase.org/search-criteria?/and+Trait="+Xenobiotic+resistance+(insecticide)+"#gephebase-summary-title</a> )			
	Trait State in Taxon A		
Varroa destructor -sensitive to pyrethroids			
	Trait State in Taxon B		
Varroa destructor - resistant to pyrethroids			
	Ancestral State		
Taxon A			
	Taxonomic Status		
Intraspecific ( <a +intraspecific+"#gephebase-summary-title"="" href="https://www.gephebase.org/search-criteria?/and+Taxonomic+Status=">https://www.gephebase.org/search-criteria?/and+Taxonomic+Status="+Intraspecific+"#gephebase-summary-title</a> )			
Taxon A		Taxon B	
	Latin Name		Latin Name
Varroa destructor ( <a +varroa+destructor+"#gephebase-summary-title"="" href="https://www.gephebase.org/search-criteria?/and+Taxon+and+Synonyms=">https://www.gephebase.org/search-criteria?/and+Taxon+and+Synonyms="+Varroa+destructor+"#gephebase-summary-title</a> )		Varroa destructor ( <a +varroa+destructor+"#gephebase-summary-title"="" href="https://www.gephebase.org/search-criteria?/and+Taxon+and+Synonyms=">https://www.gephebase.org/search-criteria?/and+Taxon+and+Synonyms="+Varroa+destructor+"#gephebase-summary-title</a> )	
	Common Name		Common Name
honeybee mite		honeybee mite	
	Synonyms		Synonyms
honeybee mite; honeybee ectoparasitic mite; Varroa destructor Anderson & Trueman, 2000		honeybee mite; honeybee ectoparasitic mite; Varroa destructor Anderson & Trueman, 2000	
	Rank		Rank
species		species	
	Lineage		Lineage
cellular organisms; Eukaryota; Opisthokonta; Metazoa; Eumetazoa; Bilateria; Protostomia; Ecdysozoa; Panarthropoda; Arthropoda; Chelicerata; Arachnida; Acari; Parasitiformes; Mesostigmata; Monogynaspidia; Gamasina; Dermanysoidea; Varroidae; Varroa		cellular organisms; Eukaryota; Opisthokonta; Metazoa; Eumetazoa; Bilateria; Protostomia; Ecdysozoa; Panarthropoda; Arthropoda; Chelicerata; Arachnida; Acari; Parasitiformes; Mesostigmata; Monogynaspidia; Gamasina; Dermanysoidea; Varroidae; Varroa	
	Parent		Parent
Varroa () - (Rank: genus) ( <a href="https://www.ncbi.nlm.nih.gov/Taxonomy/Browser/wwwtax.cgi?id=62624">https://www.ncbi.nlm.nih.gov/Taxonomy/Browser/wwwtax.cgi?id=62624</a> )		Varroa () - (Rank: genus) ( <a href="https://www.ncbi.nlm.nih.gov/Taxonomy/Browser/wwwtax.cgi?id=62624">https://www.ncbi.nlm.nih.gov/Taxonomy/Browser/wwwtax.cgi?id=62624</a> )	
	NCBI Taxonomy ID		NCBI Taxonomy ID
109461 ( <a href="https://www.ncbi.nlm.nih.gov/Taxonomy/Browser/wwwtax.cgi?id=109461">https://www.ncbi.nlm.nih.gov/Taxonomy/Browser/wwwtax.cgi?id=109461</a> )		109461 ( <a href="https://www.ncbi.nlm.nih.gov/Taxonomy/Browser/wwwtax.cgi?id=109461">https://www.ncbi.nlm.nih.gov/Taxonomy/Browser/wwwtax.cgi?id=109461</a> )	
	is Taxon A an Intraspecies?		is Taxon B an Intraspecies?
No		No	

## GENOTYPIC CHANGE

	Generic Gene Name		UniProtKB Drosophila melanogaster
para		P35500 ( <a href="http://www.uniprot.org/uniprot/P35500">http://www.uniprot.org/uniprot/P35500</a> )	GenebankID or UniProtKB
	Synonyms		
bas; bss; CG9907; Dmel\CG9907; DmNav; DmNav1; DmNa[[v]]; DmNa[[V]]; DmNa[[v]]1; l(1)14Da; l(1)ESH548; lincRNA.S9469; Nav1; Ocd; olfD; par; sbl; sbl-1; Shu; Shudderer		()	
	String		
7227.FBpp0303597 ( <a href="http://string-db.org/newstring.cgi/show_network_section.pl?identifier=7227.FBpp0303597">http://string-db.org/newstring.cgi/show_network_section.pl?identifier=7227.FBpp0303597</a> )			
	Sequence Similarities		
Belongs to the sodium channel (TC 1.A.1.10) family. Para subfamily.			
	GO - Molecular Function		
GO:0005509 : calcium ion binding ( <a href="https://www.ebi.ac.uk/QuickGO/term/GO:0005509">https://www.ebi.ac.uk/QuickGO/term/GO:0005509</a> )			
GO:0005244 : voltage-gated ion channel activity ( <a href="https://www.ebi.ac.uk/QuickGO/term/GO:0005244">https://www.ebi.ac.uk/QuickGO/term/GO:0005244</a> )			
GO:0005248 : voltage-gated sodium channel activity ( <a href="https://www.ebi.ac.uk/QuickGO/term/GO:0005248">https://www.ebi.ac.uk/QuickGO/term/GO:0005248</a> )			
GO:0005272 : sodium channel activity ( <a href="https://www.ebi.ac.uk/QuickGO/term/GO:0005272">https://www.ebi.ac.uk/QuickGO/term/GO:0005272</a> )			

GO - Biological Process

- GO:0045433 : male courtship behavior, veined wing generated song production  
(<https://www.ebi.ac.uk/QuickGO/term/GO:0045433>)
- GO:0001666 : response to hypoxia (<https://www.ebi.ac.uk/QuickGO/term/GO:0001666>)
- GO:0009612 : response to mechanical stimulus  
(<https://www.ebi.ac.uk/QuickGO/term/GO:0009612>)
- GO:0034765 : regulation of ion transmembrane transport  
(<https://www.ebi.ac.uk/QuickGO/term/GO:0034765>)
- GO:0035725 : sodium ion transmembrane transport  
(<https://www.ebi.ac.uk/QuickGO/term/GO:0035725>)
- GO:0007638 : mechanosensory behavior  
(<https://www.ebi.ac.uk/QuickGO/term/GO:0007638>)
- GO:0060078 : regulation of postsynaptic membrane potential  
(<https://www.ebi.ac.uk/QuickGO/term/GO:0060078>)

GO - Cellular Component

- GO:0005887 : integral component of plasma membrane  
(<https://www.ebi.ac.uk/QuickGO/term/GO:0005887>)
- GO:0001518 : voltage-gated sodium channel complex  
(<https://www.ebi.ac.uk/QuickGO/term/GO:0001518>)

No (<https://www.gephebase.org/search-criteria?/and+Presumptive Null=^No^#gephebase-summary-title>) Presumptive Null

Coding (<https://www.gephebase.org/search-criteria?/and+Molecular Type=^Coding^#gephebase-summary-title>) Molecular Type

SNP (<https://www.gephebase.org/search-criteria?/and+Aberration Type=^SNP^#gephebase-summary-title>) Aberration Type

Nonsynonymous SNP Coding Change

F758L+L826P+I982V+M1055I = F1528L+L1596P+I1752V+M1823I Molecular Details of the Mutation

Candidate Gene (<https://www.gephebase.org/search-criteria?/and+Experimental Evidence=^Candidate Gene^#gephebase-summary-title>) Experimental Evidence

	Taxon A	Taxon B	Position
Codon	-	-	-
Amino-acid	Phe	Leu	1528

Association of novel mutations in a sodium channel gene with fluvalinate resistance in the mite, *Varroa destructor* . (2002) (<https://pubmed.ncbi.nlm.nih.gov/00000000.000033>) Main Reference

Wang Ruiwu; Liu Zhiqi; Dong Ke; Elzen Patti J; Pettis Jeff; Huang Zachary Authors

- Abstract

Additional References

RELATED GEPHE

No matches found. Related Genes

3 ([https://www.gephebase.org/search-criteria?/or+Gene Gephebase=^para \(kdr\)^/and+Taxon ID=^109461^/or+Gene Gephebase=^para \(kdr\)^/and+Taxon ID=^109461^#gephebase-summary-title](https://www.gephebase.org/search-criteria?/or+Gene Gephebase=^para (kdr)^/and+Taxon ID=^109461^/or+Gene Gephebase=^para (kdr)^/and+Taxon ID=^109461^#gephebase-summary-title)) Related Haplotypes

EXTERNAL LINKS

COMMENTS

