

## GEPHE SUMMARY

	Gephebase Gene		GepheID
Acetylcholinesterase (Ace-1) ( <a href="https://www.gephebase.org/search-criteria?/and+Gene">https://www.gephebase.org/search-criteria?/and+Gene</a> )		GP00002589	
Gephebase="Acetylcholinesterase (Ace-1)"#gephebase-summary-title)			Main curator
	Entry Status	Courtier	
Published			

## PHENOTYPIC CHANGE

	Trait Category		
Physiology ( <a href="https://www.gephebase.org/search-criteria?/and+Trait">https://www.gephebase.org/search-criteria?/and+Trait</a> )			
Category="Physiology"#gephebase-summary-title)			
	Trait		
Xenobiotic resistance (insecticide) ( <a (insecticide)"#gephebase-summary-title"="" href="https://www.gephebase.org/search-criteria?/and+Trait=" resistance="" xenobiotic="">https://www.gephebase.org/search-criteria?/and+Trait="Xenobiotic resistance (insecticide)"#gephebase-summary-title</a> )			
	Trait State in Taxon A		
Nilaparvata lugens -sensitive			
	Trait State in Taxon B		
Nilaparvata lugens - resistant			
	Ancestral State		
Taxon A			
	Taxonomic Status		
Intraspecific ( <a href="https://www.gephebase.org/search-criteria?/and+Taxonomic">https://www.gephebase.org/search-criteria?/and+Taxonomic</a> )			
Status="Intraspecific"#gephebase-summary-title)			
	Taxon A	Taxon B	
	Latin Name		Latin Name
Nilaparvata lugens		Nilaparvata lugens	
( <a href="https://www.gephebase.org/search-criteria?/and+Taxon and Synonyms=" nilaparvata"="">https://www.gephebase.org/search-criteria?/and+Taxon and Synonyms="Nilaparvata</a> )		( <a href="https://www.gephebase.org/search-criteria?/and+Taxon and Synonyms=" nilaparvata"="">https://www.gephebase.org/search-criteria?/and+Taxon and Synonyms="Nilaparvata</a> )	
lugens"#gephebase-summary-title)		lugens"#gephebase-summary-title)	
	Common Name		Common Name
brown planthopper		brown planthopper	
	Synonyms		Synonyms
brown planthopper; Nilaparvata lugens (Stal, 1854); Nalaparvata lugens		brown planthopper; Nilaparvata lugens (Stal, 1854); Nalaparvata lugens	
	Rank		Rank
species		species	
	Lineage		Lineage
cellular organisms; Eukaryota; Opisthokonta; Metazoa; Eumetazoa; Bilateria; Protostomia;		cellular organisms; Eukaryota; Opisthokonta; Metazoa; Eumetazoa; Bilateria; Protostomia;	
Ecdysozoa; Panarthropoda; Arthropoda; Mandibulata; Pancrustacea; Hexapoda; Insecta;		Ecdysozoa; Panarthropoda; Arthropoda; Mandibulata; Pancrustacea; Hexapoda; Insecta;	
Dicondylia; Pterygota; Neoptera; Paraneoptera; Hemiptera; Auchenorrhyncha;		Dicondylia; Pterygota; Neoptera; Paraneoptera; Hemiptera; Auchenorrhyncha;	
Fulgoromorpha; Fulgoroidea; Delphacidae; Delphacinae; Nilaparvata		Fulgoromorpha; Fulgoroidea; Delphacidae; Delphacinae; Nilaparvata	
	Parent		Parent
Nilaparvata () - (Rank: genus)		Nilaparvata () - (Rank: genus)	
( <a href="https://www.ncbi.nlm.nih.gov/Taxonomy/Browser/wwwtax.cgi?id=108930">https://www.ncbi.nlm.nih.gov/Taxonomy/Browser/wwwtax.cgi?id=108930</a> )		( <a href="https://www.ncbi.nlm.nih.gov/Taxonomy/Browser/wwwtax.cgi?id=108930">https://www.ncbi.nlm.nih.gov/Taxonomy/Browser/wwwtax.cgi?id=108930</a> )	
	NCBI Taxonomy ID		NCBI Taxonomy ID
108931		108931	
( <a href="https://www.ncbi.nlm.nih.gov/Taxonomy/Browser/wwwtax.cgi?id=108931">https://www.ncbi.nlm.nih.gov/Taxonomy/Browser/wwwtax.cgi?id=108931</a> )		( <a href="https://www.ncbi.nlm.nih.gov/Taxonomy/Browser/wwwtax.cgi?id=108931">https://www.ncbi.nlm.nih.gov/Taxonomy/Browser/wwwtax.cgi?id=108931</a> )	
	is Taxon A an Intraspecies?		is Taxon B an Intraspecies?
No		No	

## GENOTYPIC CHANGE

	Generic Gene Name		UniProtKB Drosophila melanogaster
Ace		P07140 ( <a href="http://www.uniprot.org/uniprot/P07140">http://www.uniprot.org/uniprot/P07140</a> )	
	Synonyms		GenebankID or UniProtKB
AcChE; ace; ACE; ace-2; ache; AchE; AchE; CG17907; CHE; dAcChE; dmAcChE;		()	
DmAcChE; Dmel\CG17907; Dm_ace; FBgn0000024; l(3)26; l(3)87Ed			
	String		
7227.FBpp0289713			
( <a href="http://string-db.org/newstring.cgi/show_network_section.pl?identifier=7227.FBpp0289713">http://string-db.org/newstring.cgi/show_network_section.pl?identifier=7227.FBpp0289713</a> )			
	Sequence Similarities		
Belongs to the type-B carboxylesterase/lipase family.			
	GO - Molecular Function		
GO:0042803 : protein homodimerization activity			
( <a href="https://www.ebi.ac.uk/QuickGO/term/GO:0042803">https://www.ebi.ac.uk/QuickGO/term/GO:0042803</a> )			
GO:0003990 : acetylcholinesterase activity			
( <a href="https://www.ebi.ac.uk/QuickGO/term/GO:0003990">https://www.ebi.ac.uk/QuickGO/term/GO:0003990</a> )			
GO:0004104 : cholinesterase activity ( <a href="https://www.ebi.ac.uk/QuickGO/term/GO:0004104">https://www.ebi.ac.uk/QuickGO/term/GO:0004104</a> )			
GO:0043199 : sulfate binding ( <a href="https://www.ebi.ac.uk/QuickGO/term/GO:0043199">https://www.ebi.ac.uk/QuickGO/term/GO:0043199</a> )			



