

## GEPHE SUMMARY

	Gephebase Gene	GephelD
plg-1 ( <a href="https://www.gephebase.org/search-criteria?/and+Gene Gephebase='^plg-1^#gephebase-summary-title">https://www.gephebase.org/search-criteria?/and+Gene Gephebase='^plg-1^#gephebase-summary-title</a> )	GP00000898	Main curator
Published	Entry Status	Martin

## PHENOTYPIC CHANGE

	Trait Category	
Physiology ( <a href="https://www.gephebase.org/search-criteria?/and+Trait Category='^Physiology^#gephebase-summary-title">https://www.gephebase.org/search-criteria?/and+Trait Category='^Physiology^#gephebase-summary-title</a> )	Trait	
Copulatory plug ( <a href="https://www.gephebase.org/search-criteria?/and+Trait='^Copulatory plug^#gephebase-summary-title">https://www.gephebase.org/search-criteria?/and+Trait='^Copulatory plug^#gephebase-summary-title</a> )	Trait State in Taxon A	
C. elegans - copulatory plug	Trait State in Taxon B	
C. elegans - no copulatory plug	Ancestral State	
Taxon A	Taxonomic Status	
Intraspecific ( <a href="https://www.gephebase.org/search-criteria?/and+Taxonomic Status='^Intraspecific^#gephebase-summary-title">https://www.gephebase.org/search-criteria?/and+Taxonomic Status='^Intraspecific^#gephebase-summary-title</a> )		
	Taxon A	Taxon B
	Latin Name	Latin Name
Caenorhabditis elegans ( <a href="https://www.gephebase.org/search-criteria?/and+Taxon and Synonyms='^Caenorhabditis elegans^#gephebase-summary-title">https://www.gephebase.org/search-criteria?/and+Taxon and Synonyms='^Caenorhabditis elegans^#gephebase-summary-title</a> )	Caenorhabditis elegans ( <a href="https://www.gephebase.org/search-criteria?/and+Taxon and Synonyms='^Caenorhabditis elegans^#gephebase-summary-title">https://www.gephebase.org/search-criteria?/and+Taxon and Synonyms='^Caenorhabditis elegans^#gephebase-summary-title</a> )	
-	Common Name	Common Name
	Synonyms	Synonyms
roundworm; Rhabditis elegans; Caenorhabditis elegans (Maupas, 1900); Rhabditis elegans Maupas, 1900	roundworm; Rhabditis elegans; Caenorhabditis elegans (Maupas, 1900); Rhabditis elegans Maupas, 1900	
species	Rank	Rank
	Lineage	Lineage
cellular organisms; Eukaryota; Opisthokonta; Metazoa; Eumetazoa; Bilateria; Protostomia; Ecdysozoa; Nematoda; Chromadorea; Rhabditida; Rhabditina; Rhabditomorpha; Rhabditoidea; Rhabditidae; Peloderinae; Caenorhabditis	cellular organisms; Eukaryota; Opisthokonta; Metazoa; Eumetazoa; Bilateria; Protostomia; Ecdysozoa; Nematoda; Chromadorea; Rhabditida; Rhabditina; Rhabditomorpha; Rhabditoidea; Rhabditidae; Peloderinae; Caenorhabditis	
	Parent	Parent
Caenorhabditis () - (Rank: genus) ( <a href="https://www.ncbi.nlm.nih.gov/Taxonomy/Browser/wwwtax.cgi?id= 6237">https://www.ncbi.nlm.nih.gov/Taxonomy/Browser/wwwtax.cgi?id= 6237</a> )	Caenorhabditis () - (Rank: genus) ( <a href="https://www.ncbi.nlm.nih.gov/Taxonomy/Browser/wwwtax.cgi?id= 6237">https://www.ncbi.nlm.nih.gov/Taxonomy/Browser/wwwtax.cgi?id= 6237</a> )	
6239 ( <a href="https://www.ncbi.nlm.nih.gov/Taxonomy/Browser/wwwtax.cgi?id= 6239">https://www.ncbi.nlm.nih.gov/Taxonomy/Browser/wwwtax.cgi?id= 6239</a> )	NCBI Taxonomy ID	NCBI Taxonomy ID
Yes	is Taxon A an Infraspecies?	is Taxon B an Infraspecies?
	Taxon A Description	Taxon B Description
C. elegans - several wild isolates	C. elegans - N2	

## GENOTYPIC CHANGE

	Generic Gene Name	UniProtKB
-	0	
-	Synonyms	GenebankID or UniProtKB
-	0	
-	String	
-	Sequence Similarities	
-	GO - Molecular Function	
-	GO - Biological Process	
-	GO - Cellular Component	
-		Presumptive Null
Yes ( <a href="https://www.gephebase.org/search-criteria?/and+Presumptive Null='^Yes^#gephebase-summary-title">https://www.gephebase.org/search-criteria?/and+Presumptive Null='^Yes^#gephebase-summary-title</a> )		

Coding ( <a href="https://www.gephebase.org/search-criteria?/and+Molecular%20Type=%5BCoding%5D#gephebase-summary-title">https://www.gephebase.org/search-criteria?/and+Molecular Type=%5BCoding%5D#gephebase-summary-title</a> )	Molecular Type
Insertion ( <a href="https://www.gephebase.org/search-criteria?/and+Aberration%20Type=%5BInsertion%5D#gephebase-summary-title">https://www.gephebase.org/search-criteria?/and+Aberration Type=%5BInsertion%5D#gephebase-summary-title</a> )	Aberration Type
1-10 kb	Insertion Size
insertion of transposable element in an exon	Molecular Details of the Mutation
Linkage Mapping ( <a href="https://www.gephebase.org/search-criteria?/and+Experimental%20Evidence=%5BLinkage%20Mapping%5D#gephebase-summary-title">https://www.gephebase.org/search-criteria?/and+Experimental Evidence=%5BLinkage%20Mapping%5D#gephebase-summary-title</a> )	Experimental Evidence
Molecular basis of the copulatory plug polymorphism in <i>Caenorhabditis elegans</i> . (2008) ( <a href="https://pubmed.ncbi.nlm.nih.gov/18633349">https://pubmed.ncbi.nlm.nih.gov/18633349</a> )	Main Reference
Palopoli MF; Rockman MV; TinMaung A; Ramsay C; Curwen S; Aduna A; Laurita J; Kruglyak L	Authors
Heritable variation is the raw material for evolutionary change, and understanding its genetic basis is one of the central problems in modern biology. We investigated the genetic basis of a classic phenotypic dimorphism in the nematode <i>Caenorhabditis elegans</i> . Males from many natural isolates deposit a copulatory plug after mating, whereas males from other natural isolates?including the standard wild-type strain (N2 Bristol) that is used in most research laboratories?do not deposit plugs. The copulatory plug is a gelatinous mass that covers the hermaphrodite vulva, and its deposition decreases the mating success of subsequent males. We show that the plugging polymorphism results from the insertion of a retrotransposon into an exon of a novel mucin-like gene, <i>plg-1</i> , whose product is a major structural component of the copulatory plug. The gene is expressed in a subset of secretory cells of the male somatic gonad, and its loss has no evident effects beyond the loss of male mate-guarding. Although <i>C. elegans</i> descends from an obligate-outcrossing, male?female ancestor, it occurs primarily as self-fertilizing hermaphrodites. The reduced selection on male?male competition associated with the origin of hermaphroditism may have permitted the global spread of a loss-of-function mutation with restricted pleiotropy.	Abstract
	Additional References

## RELATED GEPHE

No matches found.	Related Genes
No matches found.	Related Haplotypes

## EXTERNAL LINKS

## COMMENTS

@TE; WormBase ID: WBGene00004041