

GEPHE SUMMARY

<p>CORIN (https://www.gephebase.org/search-criteria?/and+Gene+Gephebase=^CORIN^#gephebase-summary-title)</p> <p>Published</p>	<p>Gephebase Gene</p> <p>Entry Status</p>	<p>GP00002169</p> <p>Martin</p>	<p>GepheID</p> <p>Main curator</p>
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PHENOTYPIC CHANGE

<p>Morphology (https://www.gephebase.org/search-criteria?/and+Trait+Category=^Morphology^#gephebase-summary-title)</p> <p>Coloration (coat) (https://www.gephebase.org/search-criteria?/and+Trait=^Coloration+coat^#gephebase-summary-title)</p> <p>Orange striped tiger</p> <p>Golden (tabby) tiger homozygous for the recessive wideband allele</p> <p>Taxon A</p> <p>Intraspecific (https://www.gephebase.org/search-criteria?/and+Taxonomic+Status=^Intraspecific^#gephebase-summary-title)</p>	<p>Trait Category</p> <p>Trait</p> <p>Trait State in Taxon A</p> <p>Trait State in Taxon B</p> <p>Ancestral State</p> <p>Taxonomic Status</p>	<p>Taxon A</p> <p>Latin Name</p> <p><i>Panthera tigris</i> (https://www.gephebase.org/search-criteria?/and+Taxon+and+Synonyms=^Panthera+tigris^#gephebase-summary-title)</p> <p>Common Name</p> <p>tiger</p> <p>Synonyms</p> <p>tiger</p> <p>Rank</p> <p>species</p> <p>Lineage</p> <p>cellular organisms; Eukaryota; Opisthokonta; Metazoa; Eumetazoa; Bilateria; Deuterostomia; Chordata; Craniata; Vertebrata; Gnathostomata; Teleostomi; Euteleostomi; Sarcopterygii; Dipnotetrapodomorpha; Tetrapoda; Amniota; Mammalia; Theria; Eutheria; Boreoeutheria; Laurasiatheria; Carnivora; Feliformia; Felidae; Pantherinae; Panthera</p> <p>Parent</p> <p><i>Panthera</i> () - (Rank: genus) (https://www.ncbi.nlm.nih.gov/Taxonomy/Browser/wwwtax.cgi?id=9688)</p> <p>NCBI Taxonomy ID</p> <p>9694 (https://www.ncbi.nlm.nih.gov/Taxonomy/Browser/wwwtax.cgi?id=9694)</p> <p>is Taxon A an Intraspecies?</p> <p>No</p>	<p>Taxon B</p> <p>Latin Name</p> <p><i>Panthera tigris</i> (https://www.gephebase.org/search-criteria?/and+Taxon+and+Synonyms=^Panthera+tigris^#gephebase-summary-title)</p> <p>Common Name</p> <p>tiger</p> <p>Synonyms</p> <p>tiger</p> <p>Rank</p> <p>species</p> <p>Lineage</p> <p>cellular organisms; Eukaryota; Opisthokonta; Metazoa; Eumetazoa; Bilateria; Deuterostomia; Chordata; Craniata; Vertebrata; Gnathostomata; Teleostomi; Euteleostomi; Sarcopterygii; Dipnotetrapodomorpha; Tetrapoda; Amniota; Mammalia; Theria; Eutheria; Boreoeutheria; Laurasiatheria; Carnivora; Feliformia; Felidae; Pantherinae; Panthera</p> <p>Parent</p> <p><i>Panthera</i> () - (Rank: genus) (https://www.ncbi.nlm.nih.gov/Taxonomy/Browser/wwwtax.cgi?id=9688)</p> <p>NCBI Taxonomy ID</p> <p>9694 (https://www.ncbi.nlm.nih.gov/Taxonomy/Browser/wwwtax.cgi?id=9694)</p> <p>is Taxon B an Intraspecies?</p> <p>Yes</p> <p>Taxon B Description</p> <p><i>Panthera tigris tigris</i> - Bengal tiger (White tiger)</p>
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GENOTYPIC CHANGE

<p>Corin</p> <p>Lrp4; AV273130; Crn</p> <p>10090.ENSMUSP00000005352 (http://string-db.org/newstring.cgi/show_network_section.pl?identifier=10090.ENSMUSP00000005352)</p> <p>Belongs to the peptidase S1 family.</p> <p>GO - Molecular Function</p> <p>GO:0004175 : endopeptidase activity (https://www.ebi.ac.uk/QuickGO/term/GO:0004175)</p> <p>GO:0005044 : scavenger receptor activity (https://www.ebi.ac.uk/QuickGO/term/GO:0005044)</p> <p>GO:0004252 : serine-type endopeptidase activity (https://www.ebi.ac.uk/QuickGO/term/GO:0004252)</p>	<p>Generic Gene Name</p> <p>Synonyms</p> <p>String</p> <p>Sequence Similarities</p>	<p>Q9Z319 (http://www.uniprot.org/uniprot/Q9Z319)</p> <p>0</p>	<p>UniProtKB Mus musculus</p> <p>GenebankID or UniProtKB</p>
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GO - Biological Process

- GO:0030182 : neuron differentiation (<https://www.ebi.ac.uk/QuickGO/term/GO:0030182>)
- GO:0007565 : female pregnancy (<https://www.ebi.ac.uk/QuickGO/term/GO:0007565>)
- GO:0008217 : regulation of blood pressure (<https://www.ebi.ac.uk/QuickGO/term/GO:0008217>)
- GO:0016486 : peptide hormone processing (<https://www.ebi.ac.uk/QuickGO/term/GO:0016486>)
- GO:0035813 : regulation of renal sodium excretion (<https://www.ebi.ac.uk/QuickGO/term/GO:0035813>)
- GO:0003050 : regulation of systemic arterial blood pressure by atrial natriuretic peptide (<https://www.ebi.ac.uk/QuickGO/term/GO:0003050>)

GO - Cellular Component

- GO:0005886 : plasma membrane (<https://www.ebi.ac.uk/QuickGO/term/GO:0005886>)
- GO:0015629 : actin cytoskeleton (<https://www.ebi.ac.uk/QuickGO/term/GO:0015629>)
- GO:0005887 : integral component of plasma membrane (<https://www.ebi.ac.uk/QuickGO/term/GO:0005887>)
- GO:0005576 : extracellular region (<https://www.ebi.ac.uk/QuickGO/term/GO:0005576>)
- GO:0016604 : nuclear body (<https://www.ebi.ac.uk/QuickGO/term/GO:0016604>)
- GO:0031410 : cytoplasmic vesicle (<https://www.ebi.ac.uk/QuickGO/term/GO:0031410>)
- GO:0009986 : cell surface (<https://www.ebi.ac.uk/QuickGO/term/GO:0009986>)

Presumptive Null

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

Molecular Type

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

Aberration Type

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

SNP Coding Change

Nonsynonymous

Molecular Details of the Mutation

c.1759C>T p.H587Y

Experimental Evidence

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

	Taxon A	Taxon B	Position
Codon	-	-	-
Amino-acid	His	Tyr	587

Main Reference

The genetics of tiger pelage color variations. (2017) (<https://pubmed.ncbi.nlm.nih.gov/28281538>)

Authors

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Abstract

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Additional References

RELATED GEPHE

Related Genes

1 (SLC45A2=MATP) (<https://www.gephebase.org/search-criteria?/or+Taxon ID=~9694^/and+Trait=Coloration/and+groupHaplotypes=true#gephebase-summary-title>)

Related Haplotypes

No matches found.

EXTERNAL LINKS

COMMENTS

@Epistasis in captivity the double homozygotes with the Agouti allele underlie the Snow White phenotype <https://omia.org/OMIA002159/9694/>

