

GEPHE SUMMARY

KRT75L4 (https://www.gephebase.org/search-criteria/?and+Gene Gephebase=^KRT75L4^#gephebase-summary-title)	Gephebase Gene	GP00002334	GephelD
	Entry Status	Martin	Main curator
Published			

PHENOTYPIC CHANGE

Trait Category			
Morphology (https://www.gephebase.org/search-criteria/?and+Trait Category=^Morphology^#gephebase-summary-title)	Trait		
Feathers (https://www.gephebase.org/search-criteria/?and+Trait=^Feathers^#gephebase-summary-title)	Trait State in Taxon A		
Gallus gallus	Trait State in Taxon B		
Gallus gallus - Frizzle Feather in Qilin chicken breed	Ancestral State		
Taxon A	Taxonomic Status		
Domesticated (https://www.gephebase.org/search-criteria/?and+Taxonomic Status=^Domesticated^#gephebase-summary-title)			
Taxon A	Latin Name	Taxon B	Latin Name
Gallus gallus (https://www.gephebase.org/search-criteria/?and+Taxon+and+Synonyms=^Gallus+gallus^#gephebase-summary-title)		Gallus gallus (https://www.gephebase.org/search-criteria/?and+Taxon+and+Synonyms=^Gallus+gallus^#gephebase-summary-title)	
chicken	Common Name		Common Name
Gallus gallus domesticus; chicken; bantam; chickens	Synonyms		Synonyms
species	Rank		Rank
	Lineage		Lineage
cellular organisms; Eukaryota; Opisthokonta; Metazoa; Eumetazoa; Bilateria; Deuterostomia; Chordata; Craniata; Vertebrata; Gnathostomata; Teleostomi; Euteleostomi; Sarcopterygii; Dipnotetrapodomorpha; Tetrapoda; Amniota; Sauropsida; Sauria; Archelosauria; Archosauria; Dinosauria; Saurischia; Theropoda; Coelurosauria; Aves; Neognathae; Galloanserae; Galliformes; Phasianidae; Phasianinae; Gallus		cellular organisms; Eukaryota; Opisthokonta; Metazoa; Eumetazoa; Bilateria; Deuterostomia; Chordata; Craniata; Vertebrata; Gnathostomata; Teleostomi; Euteleostomi; Sarcopterygii; Dipnotetrapodomorpha; Tetrapoda; Amniota; Sauropsida; Sauria; Archelosauria; Archosauria; Dinosauria; Saurischia; Theropoda; Coelurosauria; Aves; Neognathae; Galloanserae; Galliformes; Phasianidae; Phasianinae; Gallus	
Gallus () - (Rank: genus) (https://www.ncbi.nlm.nih.gov/Taxonomy/Browser/wwwtax.cgi?id= 9030)	Parent	Gallus () - (Rank: genus) (https://www.ncbi.nlm.nih.gov/Taxonomy/Browser/wwwtax.cgi?id= 9030)	Parent
9031 (https://www.ncbi.nlm.nih.gov/Taxonomy/Browser/wwwtax.cgi?id= 9031)	NCBI Taxonomy ID	9031 (https://www.ncbi.nlm.nih.gov/Taxonomy/Browser/wwwtax.cgi?id= 9031)	NCBI Taxonomy ID
No	is Taxon A an Infraspecies?	Yes	is Taxon B an Infraspecies?
			Taxon B Description
			Gallus gallus - Frizzle Feather

GENOTYPIC CHANGE

KRT75L4	Generic Gene Name	UniProtKB Gallus gallus
-	Synonyms	GenebankID or UniProtKB
-	String	
-	Sequence Similarities	
Belongs to the intermediate filament family.	GO - Molecular Function	A0A1L1RKR4 (http://www.uniprot.org/uniprot/A0A1L1RKR4)
-	GO - Biological Process	AEX59147.1 (https://www.ncbi.nlm.nih.gov/nuccore/AEX59147.1)
-	GO - Cellular Component	
GO:0045095 : keratin filament (https://www.ebi.ac.uk/QuickGO/term/GO:0045095)		Presumptive Null

No ([#gephebase-summary-title](https://www.gephebase.org/search-criteria/?and+Presumptive+Null=%No))

Molecular Type

Coding ([#gephebase-summary-title](https://www.gephebase.org/search-criteria/?and+Molecular+Type=%Coding))

Aberration Type

Deletion ([#gephebase-summary-title](https://www.gephebase.org/search-criteria/?and+Aberration+Type=%Deletion))

Deletion Size

10-99 bp

Molecular Details of the Mutation

15bp deletion resulting in loss of 5 conserved amino-acids

Experimental Evidence

Association Mapping ([#gephebase-summary-title](https://www.gephebase.org/search-criteria/?and+Experimental+Evidence=%Association+Mapping))

Main Reference

A parallel mechanism underlying frizzle in domestic chickens. (2018) (<https://pubmed.ncbi.nlm.nih.gov/29868726>)

Authors

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Abstract

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Additional References

RELATED GEPHE

Related Genes

14 (ABCA1, CDKN2A, CYP19A1, Endothelin receptor B2, MC1R, PMEL17, SLC45A2=MATP, SOX10, tyrosinase (TYR), tyrosinase-related protein 1 (TYRP1), FGF20, GDF7,

HOXC8 - uncertain, KRT6A) ([#gephebase-summary-title](https://www.gephebase.org/search-criteria/?or+Taxon+ID=%9031%and+Trait=Feathers/and+groupHaplotypes=true))

Related Haplotypes

No matches found.

EXTERNAL LINKS

COMMENTS

@Parallelism with in-frame deletion in two distinct keratin genes