

GEPHE SUMMARY

Gephebase Gene
Agouti (ASIP)

Entry Status
Published

GepheID
GP00001977

Main curator
Martin

PHENOTYPIC CHANGE

Trait Category
Morphology

Trait
Coloration (coat)

Trait State in Taxon A
WT - Southern Africa

Trait State in Taxon B
darker 'Black Impala'

Ancestral State
Taxon A

Taxonomic Status
Intraspecific

	Taxon A		Taxon B
<i>Latin Name</i>	-	<i>Latin Name</i>	-
Common Name	-	Common Name	-
Synonyms	-	Synonyms	-
Rank	-	Rank	-
Lineage	-	Lineage	-
Parent	-	Parent	-
NCBI Taxonomy ID	9897	NCBI Taxonomy ID	9897
is Taxon A an Intraspecies?	No	is Taxon B an Intraspecies?	No

GENOTYPIC CHANGE

Generic Gene Name
Asip

Synonyms
As; ASP; A^v; ASIP; a

String
10090.ENSMUSP00000029123

Sequence Similarities
-

GO - Molecular Function
GO:0031779 : melanocortin receptor binding
GO:0031781 : type 3 melanocortin receptor binding
GO:0031782 : type 4 melanocortin receptor binding

GO - Biological Process
GO:0008343 : adult feeding behavior
GO:0006091 : generation of precursor metabolites and energy
GO:0071514 : genetic imprinting
GO:0009755 : hormone-mediated signaling pathway
GO:0042438 : melanin biosynthetic process
GO:0032438 : melanosome organization
GO:0032402 : melanosome transport
GO:0043473 : pigmentation
GO:0048023 : positive regulation of melanin biosynthetic process

UniProtKB Mus musculus
Q03288

GenebankID or UniProtKB

GO:0040030 : regulation of molecular function, epigenetic

GO - Cellular Component

GO:0005576 : extracellular region

GO:0005623 : cell

Presumptive Null

Yes

Molecular Type

Coding

Aberration Type

Deletion

Deletion Size

100-999 bp

Molecular Details of the Mutation

recessive c.174delA was found in all black phenotype sequences ; premature stop codon (239â€”241 bp)

Experimental Evidence

Candidate Gene

Main Reference

Single base-pair deletion in ASIP exon 3 associated with recessive black phenotype in impala (*Aepyceros melampus*). (2016)

Authors

Miller SM; Guthrie AJ; Harper CK

Abstract

-

Additional References

RELATED GEPHE

Related Genes

No matches found.

Related Haplotypes

No matches found.

EXTERNAL LINKS

COMMENTS

<https://omia.org/OMIA000201/9897/>