

GO:0008343 : adult feeding behavior
 (https://www.ebi.ac.uk/QuickGO/term/GO:0008343)
 GO:0006091 : generation of precursor metabolites and energy
 (https://www.ebi.ac.uk/QuickGO/term/GO:0006091)
 GO:0071514 : genetic imprinting (https://www.ebi.ac.uk/QuickGO/term/GO:0071514)
 GO:0009755 : hormone-mediated signaling pathway
 (https://www.ebi.ac.uk/QuickGO/term/GO:0009755)
 GO:0042438 : melanin biosynthetic process
 (https://www.ebi.ac.uk/QuickGO/term/GO:0042438)
 GO:0032438 : melanosome organization
 (https://www.ebi.ac.uk/QuickGO/term/GO:0032438)
 GO:0032402 : melanosome transport
 (https://www.ebi.ac.uk/QuickGO/term/GO:0032402)
 GO:0043473 : pigmentation (https://www.ebi.ac.uk/QuickGO/term/GO:0043473)
 GO:0048023 : positive regulation of melanin biosynthetic process
 (https://www.ebi.ac.uk/QuickGO/term/GO:0048023)
 GO:0040030 : regulation of molecular function, epigenetic
 (https://www.ebi.ac.uk/QuickGO/term/GO:0040030)

GO - Cellular Component

GO:0005576 : extracellular region (https://www.ebi.ac.uk/QuickGO/term/GO:0005576)
 GO:0005623 : cell (https://www.ebi.ac.uk/QuickGO/term/GO:0005623)

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

Cis-regulatory (https://www.gephebase.org/search-criteria?/and+Molecular Type=~Cis-regulatory~#gephebase-summary-title) Molecular Type

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

exact mutation(s) unknown Molecular Details of the Mutation

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

Adaptive introgression underlies polymorphic seasonal camouflage in snowshoe hares. (2018) (https://pubmed.ncbi.nlm.nih.gov/29930138) Main Reference

Jones MR; Mills LS; Alves PC; Callahan CM; Alves JM; Lafferty DJR; Jiggins FM; Jensen JD; Melo-Ferreira J; Good JM Authors

Snowshoe hares (*Lepus americanus*) maintain seasonal camouflage by molting to a white winter coat, but some hares remain brown during the winter in regions with low snow cover. We show that cis-regulatory variation controlling seasonal expression of the Agouti gene underlies this adaptive winter camouflage polymorphism. Genetic variation at Agouti clustered by winter coat color across multiple hare and jackrabbit species, revealing a history of recurrent interspecific gene flow. Brown winter coats in snowshoe hares likely originated from an introgressed black-tailed jackrabbit allele that has swept to high frequency in mild winter environments. These discoveries show that introgression of genetic variants that underlie key ecological traits can seed past and ongoing adaptation to rapidly changing environments. Abstract

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RELATED GEPHE

No matches found. Related Genes

No matches found. Related Haplotypes

EXTERNAL LINKS

COMMENTS

@Introgression of the winter-brown allele from the neighboring black-tailed jackrabbit (*Lepus californicus*).