

## GEPHE SUMMARY

<p>amylase (<a href="https://www.gephebase.org/search-criteria?/and+Gene+Gephebase=^amylase^#gephebase-summary-title">https://www.gephebase.org/search-criteria?/and+Gene+Gephebase=^amylase^#gephebase-summary-title</a>)</p> <p>Published</p>	<p>Gephebase Gene</p> <p>Entry Status</p>	<p>GP00001907</p> <p>Courtier</p>	<p>GepheID</p> <p>Main curator</p>
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## PHENOTYPIC CHANGE

<p>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>)</p> <p>Starch processing (<a href="https://www.gephebase.org/search-criteria?/and+Trait=^Starch+processing^#gephebase-summary-title">https://www.gephebase.org/search-criteria?/and+Trait=^Starch+processing^#gephebase-summary-title</a>)</p> <p>Asian badger</p> <p>Asian badger</p> <p>Taxon A</p> <p>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>)</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>Meles leucurus (<a href="https://www.gephebase.org/search-criteria?/and+Taxon+and+Synonyms=^Meles+leucurus^#gephebase-summary-title">https://www.gephebase.org/search-criteria?/and+Taxon+and+Synonyms=^Meles+leucurus^#gephebase-summary-title</a>)</p> <p>Asian badger</p> <p>Meles meles leucurus; Asian badger; Meles leucurus (Hodgson, 1847) species</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; Caniformia; Mustelidae; Melinae; Meles</p> <p>Meles () - (Rank: genus) (<a href="https://www.ncbi.nlm.nih.gov/Taxonomy/Browser/wwwtax.cgi?id=9661">https://www.ncbi.nlm.nih.gov/Taxonomy/Browser/wwwtax.cgi?id=9661</a>)</p> <p>702266 (<a href="https://www.ncbi.nlm.nih.gov/Taxonomy/Browser/wwwtax.cgi?id=702266">https://www.ncbi.nlm.nih.gov/Taxonomy/Browser/wwwtax.cgi?id=702266</a>)</p> <p>No is Taxon A an Intraspecies?</p>	<p>Latin Name</p> <p>Common Name</p> <p>Synonyms</p> <p>Rank</p> <p>Lineage</p> <p>Parent</p> <p>NCBI Taxonomy ID</p> <p>is Taxon B an Intraspecies?</p>	<p>Taxon B</p> <p>Meles leucurus (<a href="https://www.gephebase.org/search-criteria?/and+Taxon+and+Synonyms=^Meles+leucurus^#gephebase-summary-title">https://www.gephebase.org/search-criteria?/and+Taxon+and+Synonyms=^Meles+leucurus^#gephebase-summary-title</a>)</p> <p>Asian badger</p> <p>Meles meles leucurus; Asian badger; Meles leucurus (Hodgson, 1847) species</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; Caniformia; Mustelidae; Melinae; Meles</p> <p>Meles () - (Rank: genus) (<a href="https://www.ncbi.nlm.nih.gov/Taxonomy/Browser/wwwtax.cgi?id=9661">https://www.ncbi.nlm.nih.gov/Taxonomy/Browser/wwwtax.cgi?id=9661</a>)</p> <p>702266 (<a href="https://www.ncbi.nlm.nih.gov/Taxonomy/Browser/wwwtax.cgi?id=702266">https://www.ncbi.nlm.nih.gov/Taxonomy/Browser/wwwtax.cgi?id=702266</a>)</p> <p>No is Taxon B an Intraspecies?</p>	<p>Latin Name</p> <p>Common Name</p> <p>Synonyms</p> <p>Rank</p> <p>Lineage</p> <p>Parent</p> <p>NCBI Taxonomy ID</p> <p>is Taxon B an Intraspecies?</p>
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## GENOTYPIC CHANGE

<p>Amy1</p> <p>Amy-1; Amy1a; C030014B17Rik; Amy-1-a</p> <p>10090.ENSMUSP00000070368 (<a href="http://string-db.org/newstring.cgi/show_network_section.pl?identifier=10090.ENSMUSP00000070368">http://string-db.org/newstring.cgi/show_network_section.pl?identifier=10090.ENSMUSP00000070368</a>)</p> <p>Belongs to the glycosyl hydrolase 13 family.</p> <p>GO:0004556 : alpha-amylase activity (<a href="https://www.ebi.ac.uk/QuickGO/term/GO:0004556">https://www.ebi.ac.uk/QuickGO/term/GO:0004556</a>)</p> <p>GO:0103025 : alpha-amylase activity (releasing maltohexaose) (<a href="https://www.ebi.ac.uk/QuickGO/term/GO:0103025">https://www.ebi.ac.uk/QuickGO/term/GO:0103025</a>)</p> <p>GO:0005509 : calcium ion binding (<a href="https://www.ebi.ac.uk/QuickGO/term/GO:0005509">https://www.ebi.ac.uk/QuickGO/term/GO:0005509</a>)</p> <p>GO:0016160 : amylase activity (<a href="https://www.ebi.ac.uk/QuickGO/term/GO:0016160">https://www.ebi.ac.uk/QuickGO/term/GO:0016160</a>)</p> <p>GO:0031404 : chloride ion binding (<a href="https://www.ebi.ac.uk/QuickGO/term/GO:0031404">https://www.ebi.ac.uk/QuickGO/term/GO:0031404</a>)</p>	<p>Generic Gene Name</p> <p>Synonyms</p> <p>String</p> <p>Sequence Similarities</p> <p>GO - Molecular Function</p>	<p>P00687 (<a href="http://www.uniprot.org/uniprot/P00687">http://www.uniprot.org/uniprot/P00687</a>)</p> <p>()</p>	<p>UniProtKB Mus musculus</p> <p>GenebankID or UniProtKB</p>
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GO - Biological Process

GO:0009617 : response to bacterium (<https://www.ebi.ac.uk/QuickGO/term/GO:0009617>)

GO:0016052 : carbohydrate catabolic process

(<https://www.ebi.ac.uk/QuickGO/term/GO:0016052>)

GO - Cellular Component

GO:0005615 : extracellular space (<https://www.ebi.ac.uk/QuickGO/term/GO:0005615>)

Presumptive Null

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

Molecular Type

Gene Amplification ([#ghepbase-summary-title](https://www.gephebase.org/search-criteria?/and+Molecular+Type+Gene+Amplification))

Aberration Type

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

Insertion Size

1-10 kb

Molecular Details of the Mutation

Copy Number Variation varies between one and four in this species

Experimental Evidence

Candidate Gene ([#ghepbase-summary-title](https://www.gephebase.org/search-criteria?/and+Experimental+Evidence+Candidate+Gene))

Main Reference

Variation in pancreatic amylase gene copy number among Eurasian badgers (Carnivora, Mustelidae, Meles) and its relationship to diet . (2019 )

(<https://pubmed.ncbi.nlm.nih.gov/00000000.000016>)

Authors

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Abstract

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Additional References

RELATED GEPHE

Related Genes

No matches found.

Related Haplotypes

No matches found.

EXTERNAL LINKS

COMMENTS

@ParallelEvolution in mice; humans; dogs; rats