

GEPHE SUMMARY

GHSR (https://www.gephebase.org/search-criteria?/and+GeneGephebase=~GHSR^#gephebase-summary-title)	Gephebase Gene	GP00000394	GepheID
	Entry Status	Martin	Main curator
	Published		

PHENOTYPIC CHANGE

Morphology (https://www.gephebase.org/search-criteria?/and+TraitCategory=~Morphology^#gephebase-summary-title)		Trait Category	
Body size (height) (https://www.gephebase.org/search-criteria?/and+Trait=~Body size (height)^#gephebase-summary-title)		Trait	
Homo sapiens		Trait State in Taxon A	
Homo sapiens		Trait State in Taxon B	
Data not curated		Ancestral State	
Intraspecific (https://www.gephebase.org/search-criteria?/and+TaxonomicStatus=~Intraspecific^#gephebase-summary-title)		Taxonomic Status	
Taxon A		Taxon B	
Homo sapiens (https://www.gephebase.org/search-criteria?/and+Taxon and Synonyms=~Homo sapiens^#gephebase-summary-title)		Homo sapiens (https://www.gephebase.org/search-criteria?/and+Taxon and Synonyms=~Homo sapiens^#gephebase-summary-title)	
human		human	
human; man; Homo sapiens Linnaeus, 1758; Home sapiens; Homo sampiens; Homo sapeins; Homo sapian; Homo sapians; Homo sapien; Homo sapience; Homo sapiense; Homo sapients; Homo sapines; Homo spaiens; Homo spiens; Humo sapiens		human; man; Homo sapiens Linnaeus, 1758; Home sapiens; Homo sampiens; Homo sapeins; Homo sapian; Homo sapians; Homo sapien; Homo sapience; Homo sapiense; Homo sapients; Homo sapines; Homo spaiens; Homo spiens; Humo sapiens	
species		species	
cellular organisms; Eukaryota; Opisthokonta; Metazoa; Eumetazoa; Bilateria; Deuterostomia; Chordata; Craniata; Vertebrata; Gnathostomata; Teleostomi; Euteleostomi; Sarcopterygii; Dipnotetrapodomorpha; Tetrapoda; Amniota; Mammalia; Theria; Eutheria; Boreoeutheria; Euarchontoglires; Primates; Haplorrhini; Simiiformes; Catarrhini; Hominoidea; Hominidae; Homininae; Homo		cellular organisms; Eukaryota; Opisthokonta; Metazoa; Eumetazoa; Bilateria; Deuterostomia; Chordata; Craniata; Vertebrata; Gnathostomata; Teleostomi; Euteleostomi; Sarcopterygii; Dipnotetrapodomorpha; Tetrapoda; Amniota; Mammalia; Theria; Eutheria; Boreoeutheria; Euarchontoglires; Primates; Haplorrhini; Simiiformes; Catarrhini; Hominoidea; Hominidae; Homininae; Homo	
Homo () - (Rank: genus) (https://www.ncbi.nlm.nih.gov/Taxonomy/Browser/wwwtax.cgi?id= 9605)		Homo () - (Rank: genus) (https://www.ncbi.nlm.nih.gov/Taxonomy/Browser/wwwtax.cgi?id= 9605)	
9606 (https://www.ncbi.nlm.nih.gov/Taxonomy/Browser/wwwtax.cgi?id= 9606)		9606 (https://www.ncbi.nlm.nih.gov/Taxonomy/Browser/wwwtax.cgi?id= 9606)	
No		No	

GENOTYPIC CHANGE

GHSR	Generic Gene Name	UniProtKB Homo sapiens
	Synonyms	Q92847 (http://www.uniprot.org/uniprot/Q92847)
	String	BC113547 (https://www.ncbi.nlm.nih.gov/nucore/BC113547)
9606.ENSPP00000241256 (http://string-db.org/newstring.cgi/show_network_section.pl?identifier=9606.ENSPP00000241256)		
Belongs to the G-protein coupled receptor 1 family.		
GO:0017046 : peptide hormone binding (https://www.ebi.ac.uk/QuickGO/term/GO:0017046)		
GO:0004930 : G protein-coupled receptor activity (https://www.ebi.ac.uk/QuickGO/term/GO:0004930)		

GO:0001616 : growth hormone secretagogue receptor activity
(<https://www.ebi.ac.uk/QuickGO/term/GO:0001616>)
GO:0016520 : growth hormone-releasing hormone receptor activity
(<https://www.ebi.ac.uk/QuickGO/term/GO:0016520>)

GO - Biological Process

GO:0008343 : adult feeding behavior
(<https://www.ebi.ac.uk/QuickGO/term/GO:0008343>)
GO:0009755 : hormone-mediated signaling pathway
(<https://www.ebi.ac.uk/QuickGO/term/GO:0009755>)
GO:0007186 : G protein-coupled receptor signaling pathway
(<https://www.ebi.ac.uk/QuickGO/term/GO:0007186>)
GO:0050728 : negative regulation of inflammatory response
(<https://www.ebi.ac.uk/QuickGO/term/GO:0050728>)
GO:0043568 : positive regulation of insulin-like growth factor receptor signaling pathway
(<https://www.ebi.ac.uk/QuickGO/term/GO:0043568>)
GO:0007283 : spermatogenesis (<https://www.ebi.ac.uk/QuickGO/term/GO:0007283>)
GO:0032355 : response to estradiol (<https://www.ebi.ac.uk/QuickGO/term/GO:0032355>)
GO:0099175 : regulation of postsynapse organization
(<https://www.ebi.ac.uk/QuickGO/term/GO:0099175>)
GO:0071222 : cellular response to lipopolysaccharide
(<https://www.ebi.ac.uk/QuickGO/term/GO:0071222>)
GO:0008154 : actin polymerization or depolymerization
(<https://www.ebi.ac.uk/QuickGO/term/GO:0008154>)
GO:0032869 : cellular response to insulin stimulus
(<https://www.ebi.ac.uk/QuickGO/term/GO:0032869>)
GO:1990314 : cellular response to insulin-like growth factor stimulus
(<https://www.ebi.ac.uk/QuickGO/term/GO:1990314>)
GO:0097067 : cellular response to thyroid hormone stimulus
(<https://www.ebi.ac.uk/QuickGO/term/GO:0097067>)
GO:0046697 : decidualization (<https://www.ebi.ac.uk/QuickGO/term/GO:0046697>)
GO:0036321 : ghrelin secretion (<https://www.ebi.ac.uk/QuickGO/term/GO:0036321>)
GO:0030252 : growth hormone secretion
(<https://www.ebi.ac.uk/QuickGO/term/GO:0030252>)
GO:0007611 : learning or memory (<https://www.ebi.ac.uk/QuickGO/term/GO:0007611>)
GO:0032099 : negative regulation of appetite
(<https://www.ebi.ac.uk/QuickGO/term/GO:0032099>)
GO:0046676 : negative regulation of insulin secretion
(<https://www.ebi.ac.uk/QuickGO/term/GO:0046676>)
GO:0032691 : negative regulation of interleukin-1 beta production
(<https://www.ebi.ac.uk/QuickGO/term/GO:0032691>)
GO:0045409 : negative regulation of interleukin-6 biosynthetic process
(<https://www.ebi.ac.uk/QuickGO/term/GO:0045409>)
GO:0090327 : negative regulation of locomotion involved in locomotory behavior
(<https://www.ebi.ac.uk/QuickGO/term/GO:0090327>)
GO:2000110 : negative regulation of macrophage apoptotic process
(<https://www.ebi.ac.uk/QuickGO/term/GO:2000110>)
GO:0010700 : negative regulation of norepinephrine secretion
(<https://www.ebi.ac.uk/QuickGO/term/GO:0010700>)
GO:0042536 : negative regulation of tumor necrosis factor biosynthetic process
(<https://www.ebi.ac.uk/QuickGO/term/GO:0042536>)
GO:1904468 : negative regulation of tumor necrosis factor secretion
(<https://www.ebi.ac.uk/QuickGO/term/GO:1904468>)
GO:0032100 : positive regulation of appetite
(<https://www.ebi.ac.uk/QuickGO/term/GO:0032100>)
GO:1904000 : positive regulation of eating behavior
(<https://www.ebi.ac.uk/QuickGO/term/GO:1904000>)
GO:0045923 : positive regulation of fatty acid metabolic process
(<https://www.ebi.ac.uk/QuickGO/term/GO:0045923>)
GO:0040018 : positive regulation of multicellular organism growth
(<https://www.ebi.ac.uk/QuickGO/term/GO:0040018>)
GO:0120058 : positive regulation of small intestinal transit
(<https://www.ebi.ac.uk/QuickGO/term/GO:0120058>)
GO:1904349 : positive regulation of small intestine smooth muscle contraction
(<https://www.ebi.ac.uk/QuickGO/term/GO:1904349>)
GO:1903672 : positive regulation of sprouting angiogenesis
(<https://www.ebi.ac.uk/QuickGO/term/GO:1903672>)
GO:1905564 : positive regulation of vascular endothelial cell proliferation
(<https://www.ebi.ac.uk/QuickGO/term/GO:1905564>)
GO:0099170 : postsynaptic modulation of chemical synaptic transmission
(<https://www.ebi.ac.uk/QuickGO/term/GO:0099170>)
GO:1905333 : regulation of gastric motility
(<https://www.ebi.ac.uk/QuickGO/term/GO:1905333>)
GO:0060123 : regulation of growth hormone secretion
(<https://www.ebi.ac.uk/QuickGO/term/GO:0060123>)
GO:0043134 : regulation of hindgut contraction
(<https://www.ebi.ac.uk/QuickGO/term/GO:0043134>)
GO:0098696 : regulation of neurotransmitter receptor localization to postsynaptic specialization membrane (<https://www.ebi.ac.uk/QuickGO/term/GO:0098696>)

GO:0051963 : regulation of synapse assembly
(<https://www.ebi.ac.uk/QuickGO/term/GO:0051963>)
GO:0051969 : regulation of transmission of nerve impulse
(<https://www.ebi.ac.uk/QuickGO/term/GO:0051969>)
GO:0071548 : response to dexamethasone
(<https://www.ebi.ac.uk/QuickGO/term/GO:0071548>)
GO:0032354 : response to follicle-stimulating hormone
(<https://www.ebi.ac.uk/QuickGO/term/GO:0032354>)
GO:0032094 : response to food (<https://www.ebi.ac.uk/QuickGO/term/GO:0032094>)
GO:0060416 : response to growth hormone
(<https://www.ebi.ac.uk/QuickGO/term/GO:0060416>)
GO:0009725 : response to hormone (<https://www.ebi.ac.uk/QuickGO/term/GO:0009725>)
GO:1904008 : response to monosodium glutamate
(<https://www.ebi.ac.uk/QuickGO/term/GO:1904008>)

GO - Cellular Component

GO:0005886 : plasma membrane (<https://www.ebi.ac.uk/QuickGO/term/GO:0005886>)
GO:0045121 : membrane raft (<https://www.ebi.ac.uk/QuickGO/term/GO:0045121>)
GO:0098978 : glutamatergic synapse
(<https://www.ebi.ac.uk/QuickGO/term/GO:0098978>)
GO:0043005 : neuron projection (<https://www.ebi.ac.uk/QuickGO/term/GO:0043005>)
GO:0009986 : cell surface (<https://www.ebi.ac.uk/QuickGO/term/GO:0009986>)
GO:0098794 : postsynapse (<https://www.ebi.ac.uk/QuickGO/term/GO:0098794>)
GO:0099699 : integral component of synaptic membrane
(<https://www.ebi.ac.uk/QuickGO/term/GO:0099699>)
GO:0098685 : Schaffer collateral - CA1 synapse
(<https://www.ebi.ac.uk/QuickGO/term/GO:0098685>)

	Presumptive Null
Unknown (https://www.gephebase.org/search-criteria?/and+Presumptive Null=~Unknown~#gephebase-summary-title)	
	Molecular Type
Unknown (https://www.gephebase.org/search-criteria?/and+Molecular Type=~Unknown~#gephebase-summary-title)	
	Aberration Type
Unknown (https://www.gephebase.org/search-criteria?/and+Aberration Type=~Unknown~#gephebase-summary-title)	
	Molecular Details of the Mutation
unknown	
	Experimental Evidence
Association Mapping (https://www.gephebase.org/search-criteria?/and+Experimental Evidence=~Association Mapping~#gephebase-summary-title)	
	Main Reference
Recent progress in the study of the genetics of height. (2011) (https://pubmed.ncbi.nlm.nih.gov/21340692)	
	Authors
Lettre G	

	Abstract
Adult height is a classic polygenic trait of high narrow-sense heritability ($h^2 = 0.8$). In the late nineteenth to early twentieth century, variation in adult height was used as a model to set the foundation of the fields of statistics and quantitative genetics. More recently, with our increasing knowledge concerning the extent of genetic variation in the human genome, human geneticists have used genome-wide association studies to identify hundreds of loci robustly associated with adult height, providing new insights into human growth and development, and into the architecture of complex human traits. In this review, I highlight the progress made in the last 2 years in understanding how genetic variation controls height variation in humans, including non-Caucasian populations and children.	
	Additional References

RELATED GEPHE

	Related Genes
23 (ADAMTS10, aggrecan, CREBRF, DC-STAMP domain containing 2 (DCST2), DYM, EIF2AK3, FTO, GDF5, GPR133, Growth Hormone Receptor (GHR), HMGA2, Insulin-like growth factor receptor 1 (IGF1R), JAZF1, KCNQ1, LCORL, LIN28B, natriuretic peptide precursor type C (NPPC), natriuretic peptide receptor 3 (NPR3), Patched1 (Ptc1), PPAR-delta, TRIP11 (=GMAP-210), SMAD family member 2 (SMAD2), stanniocalcin 2 (STC2)) (https://www.gephebase.org/search-criteria?/or+Taxon ID=~9606~/and+Trait=Body size/and+groupHaplotypes=true#gephebase-summary-title)	
	Related Haplotypes
No matches found.	

EXTERNAL LINKS

COMMENTS

