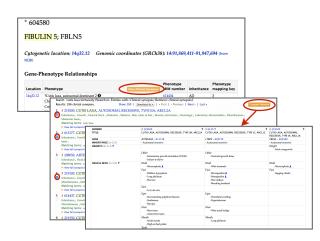
OMIM Allelic Variants

Mutations are cataloged in OMIM in the Allelic Variants section of gene entries. Only select mutations are included. Selection criteria include the first mutation to be discovered, high population frequency, distinctive phenotype, historic significance, unusual mechanism of mutation, unusual pathogenetic mechanism, and distinctive inheritance (e.g., dominant with some mutations, recessive with other mutations in the same gene). Most of the allelic variants represent disease-causing mutations. A few polymorphisms are included, many of which show a positive correlation with particular common disorders. To see more variants in a gene, follow links in OMIM to ClinVar, gnomAD, and many other variant resources.

604580						Download As +	η			
FIBULIN	5; FBLN5									
Allelic Variants (16 Selected Examples) :										
Number 🔺	Phenotype	Mutation (SNP	gnomAD	ClinVar					
.0001	CUTIS LAXA, AUTOSOMAL RECESSIVE, TYPE IA	FBLN5. SER227PRO	rs28939370 -		RCV000	005809				
0002	CUTIS LAXA, AUTOSOMAL DOMINANT 2 (1 patient)	FBLN5, 483-BP DUP	-	•	RCV000	005810				
0003	MACULAR DEGENERATION, AGE-RELATED, 3	FBLN5, VAL60LEU	rs121434299 +	rs121434299	RCV000	005811				
0004	MACULAR DEGENERATION, AGE-RELATED, 3	FBLN5, ARG71GLN	rs121434300 +	rs121434300	RCV000005812		1			
0005	MACULAR DEGENERATION, AGE-RELATED, 3	FBLN5, PRO87SER	rs121434301 •	rs121434301	RCV000	005813				
0006 0007	* ALLELIC VARIANTS (16 Selected Example 10 Sel	amples):				▼ Externa	Links			
0008	Table View ClinVar					Genome				
0009						> DNA				
0010	.0001 CUTIS LAXA, AUTOSOMAL REC	ESSIVE, TYPE IA				PDIA				
0011	FBLN5, SER227PRO n28999370 - RCV000005805	Real Provide P				Protein				
	Loeys et al. (2002) studied a large consanguir	Gene Info								
	Maldergem et al. (1988), in which 4 patients v									
	(ARCL1A; 219100) and demonstrated homoz	Clinical Resources								
	mutation was predicted to result in a ser227-					Variation				
	domain of fibulin-5 protein. Because serine is	IS	ClinVar							
	well as in human fibulin-3, substitution for th		gnomAD	- \						
	functional consequences for normal elastoger	(GWAS Cat GWAS Cer							
	Hu et al. (2006) showed that S227P mutant fil	te	HGMD							
	compared to wildtype. The mutant also failed		NHLBI EVS PharmGKE							
	lung fibroblasts. Purified recombinant S227P			/						
	solid-phase binding assays as well as impaire		Animal M	odels						
	the mutant protein triggered an endoplasmic		Cellular Pathways							
	colocalization of the mutant with folding chaperones in the ER and by increased rates of apoptosis in									

Side-by-side Clinical Synopsis viewer





Human Genetics Knowledge

for the World

Compare clinical features among phenotypes side-by-side by selecting entries from a Clinical Synopsis Quick View page, from each Phenotypic Series page, from the link within the Gene-Phenotype Relationship table in gene entries with more than one phenotype, and at the top of the Phenotype MIM# column in gene map table view. Brief video tutorials explain this and other strategies for optimizing searches and using MIMmatch. These tutorials and other help are available from the "Help" menu option at the top of every OMIM.org page.



O M I M ® Your key to understanding the human genome

read, research, connect

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OMIM[®] (Online *Mendelian Inheritance in Man*) is a continuously updated authoritative compendium of human genes and genetic phenotypes (disorders and traits) with full-text, referenced overviews of over 8,800 phenotypes and over 17,200 genes. OMIM focuses on the relationships between phenotypes and genes. In addition to the descriptive entries, **OMIM.org** provides additional unique

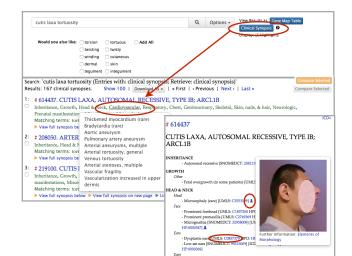
displays of information including the Clinical Synopses, Gene Map, Phenotypic Series, and Phene-Gene Graphics.

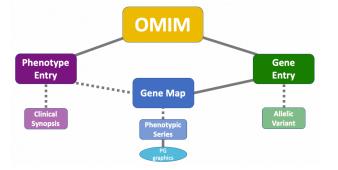
Essential diagnostic tool

Clinicians search OMIM using clinical features to facilitate diagnosis of patients.

Resource for disease gene discovery

OMIM connects clinical features of a phenotype with the molecular biology of genes and their variants.





Information framework: Dashed lines indicate that not all genes have allelic variants; not all phenotypes are mapped; not all phenotypes have Clinical Synopses; and mapped phenotypes are not necessarily part of a Phenotypic Series.

Searching clinical features

Searching on clinical features is enhanced by a thesaurus, which allows you to select additional terms to include in your search. A quick view of clinical synopses, currently available for most phenotypes, is obtained from a button next to the search box. Placing your mouse over an anatomical category reveals the underlying features. From the full view of a synopsis, mousing over the EoM link (¹) reveals the Elements of Morphology picture representation of the term. There is also an optional display of the feature identifiers from UMLS, SNOMED CT, HPO, and others.

Human- and machinereadable formats

OMIM information is structured and mapped to resources such as HPO, SNOMED CT, and Orphanet. All of this is available through the API. Stay connected with MIMmatch

Enroll to follow updates to genes and phenotypes of interest to you, stay current on new disease-gene relationships, find other scientists with similar interests.

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	Matchir	table	GRCh38)	Gene/Locus	name	MIM number	Phenotype	Compare		Inheritance	key	Comments	
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		3:	1:244,048,491 1044	ZNF238,	Zinc finger and BTB	008433	developmental	612337		AD.	5		2.00
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	I						hyperkinetic						
		6:	3:114.314.500		Zinc finger	606025	movements Primrose syndrome	259050		AD	3		Zbt

Easy navigation between genes and phenotypes

OMIM provides various views of gene and phenotype relationships. Finding the phenotypes associated with a particular class of gene can be as easy as searching on the class of gene, for example "zinc finger protein", and selecting the gene map table link to the right of the search box. From the gene map table, select "phenotype only entries" to condense the table to just entries with phenotypes.