

GeDiPNet Cluster 50 -- Top Shared Genes

Curated genes (disease_gdp) linked to 2 or more of this cluster's member diseases, most widely shared first. Data as of: 2026-10-07 03:15:01. · Rows: 76 · Generated: 2026-10-07 12:41:19

Gene	Member Diseases Linked	Cluster Size	Linked Diseases
FBN1	10	16	Aneurysm; Aortic aneurysm; Congenital aneurysm of ascending aorta; Congenital contractural arachnodactyly; Ehlers-danlos syndrome; familial thoracic aortic aneurysm and aortic dissection; Loeys-dietz syndrome; Marfan syndrome; Mitral valve prolapse; Thoracic aortic aneurysm and aortic dissection
SMAD3	9	16	Aneurysm; Aortic aneurysm; Congenital aneurysm of ascending aorta; Congenital contractural arachnodactyly; Ehlers-danlos syndrome; Keratoconus; Loeys-dietz syndrome; Marfan syndrome; Thoracic aortic aneurysm and aortic dissection
LOX	8	16	Aortic aneurysm; Congenital aneurysm of ascending aorta; Congenital contractural arachnodactyly; Ehlers-danlos syndrome; familial thoracic aortic aneurysm and aortic dissection; Keratoconus; Marfan syndrome; Thoracic aortic aneurysm and aortic dissection
COL3A1	7	16	Aortic aneurysm; Congenital aneurysm of ascending aorta; Congenital contractural arachnodactyly; Ehlers-danlos syndrome; Loeys-dietz syndrome; Marfan syndrome; Thoracic aortic aneurysm and aortic dissection
MYH11	7	16	Aortic aneurysm; Congenital aneurysm of ascending aorta; Ehlers-danlos syndrome; familial thoracic aortic aneurysm and aortic dissection; Loeys-dietz syndrome; Marfan syndrome; Thoracic aortic aneurysm and aortic dissection
TGFB2	7	16	Aortic aneurysm; Congenital contractural arachnodactyly; Ehlers-danlos syndrome; familial thoracic aortic aneurysm and aortic dissection; Loeys-dietz syndrome; Marfan syndrome; Thoracic aortic aneurysm and aortic dissection
TGFBR2	7	16	Aortic aneurysm; Congenital aneurysm of ascending aorta; Congenital contractural arachnodactyly; Ehlers-danlos syndrome; Loeys-dietz syndrome; Marfan syndrome; Thoracic aortic aneurysm and aortic dissection
COL5A1	6	16	Ehlers-danlos syndrome; Keratoconus; Loeys-dietz syndrome; Marfan syndrome; Mitral valve prolapse; Thoracic aortic aneurysm and aortic dissection
FBN2	6	16	Aortic aneurysm; Congenital contractural arachnodactyly; Ehlers-danlos syndrome; Loeys-dietz syndrome; Marfan syndrome; Thoracic aortic aneurysm and aortic dissection
FLNA	6	16	Aortic aneurysm; Ehlers-danlos syndrome; familial thoracic aortic aneurysm and aortic dissection; Marfan syndrome; Mitral valve prolapse; Thoracic aortic aneurysm and aortic dissection
MYLK	6	16	Aortic aneurysm; Congenital aneurysm of ascending aorta; familial thoracic aortic aneurysm and aortic dissection; Loeys-dietz syndrome; Marfan syndrome; Thoracic aortic aneurysm and aortic dissection
TGFBR1	6	16	Aortic aneurysm; Congenital contractural arachnodactyly; Ehlers-danlos syndrome; Loeys-dietz syndrome; Marfan syndrome; Thoracic aortic aneurysm and aortic dissection
COL5A2	5	16	Ehlers-danlos syndrome; Keratoconus; Loeys-dietz syndrome; Marfan syndrome; Thoracic aortic aneurysm and aortic dissection
MFAP5	5	16	Aortic aneurysm; Congenital contractural arachnodactyly; familial thoracic aortic aneurysm and aortic dissection; Marfan syndrome; Thoracic aortic aneurysm and aortic dissection
PLOD1	5	16	Congenital contractural arachnodactyly; Ehlers-danlos syndrome; Keratoconus; Mitral valve prolapse; Thoracic aortic aneurysm and aortic dissection
SLC2A10	5	16	Aortic aneurysm; Congenital contractural arachnodactyly; Ehlers-danlos syndrome; Marfan syndrome; Thoracic aortic aneurysm and aortic dissection
SMAD2	5	16	Congenital contractural arachnodactyly; Loeys-dietz syndrome; loeys-dietz syndrome 6; Marfan syndrome; Thoracic aortic aneurysm and aortic dissection
TGFB3	5	16	Congenital contractural arachnodactyly; familial thoracic aortic aneurysm and aortic dissection; Loeys-dietz syndrome; Marfan syndrome; Thoracic aortic aneurysm and aortic dissection
ACTA2	4	16	Aneurysm; Aortic aneurysm; Marfan syndrome; Thoracic aortic aneurysm and aortic dissection
BGN	4	16	Congenital contractural arachnodactyly; familial thoracic aortic aneurysm and aortic dissection; Marfan syndrome; Thoracic aortic aneurysm and aortic dissection
COL1A1	4	16	Ehlers-danlos syndrome; Keratoconus; Marfan syndrome; Thoracic aortic aneurysm and aortic dissection
FOXE3	4	16	Aortic aneurysm; Congenital aneurysm of ascending aorta; familial thoracic aortic aneurysm and aortic dissection; Thoracic aortic aneurysm and aortic dissection
PRKG1	4	16	Aortic aneurysm; familial thoracic aortic aneurysm and aortic dissection; Marfan syndrome; Thoracic aortic aneurysm and aortic dissection
THSD4	4	16	Aortic aneurysm; Congenital contractural arachnodactyly; Marfan syndrome; Thoracic aortic aneurysm and aortic dissection

Gene	Member Diseases Linked	Cluster Size	Linked Diseases
DAB2IP	3	16	Aneurysm; Aortic aneurysm; Keratoconus
EFEMP2	3	16	Aortic aneurysm; Congenital contractural arachnodactyly; Thoracic aortic aneurysm and aortic dissection
IPO8	3	16	Congenital contractural arachnodactyly; Loeys-dietz syndrome; Marfan syndrome
KCNH5	3	16	Aneurysm; Aortic aneurysm; neonatal/infantile epilepsy syndrome
LTBP3	3	16	Congenital contractural arachnodactyly; Marfan syndrome; Mitral valve prolapse
MAT2A	3	16	familial thoracic aortic aneurysm and aortic dissection; Marfan syndrome; Thoracic aortic aneurysm and aortic dissection
NCKAP5	3	16	Aneurysm; Aortic aneurysm; Vitreous body disease
NDE1	3	16	Aortic aneurysm; Congenital aneurysm of ascending aorta; Thoracic aortic aneurysm and aortic dissection
NOTCH1	3	16	Ehlers-danlos syndrome; Marfan syndrome; Thoracic aortic aneurysm and aortic dissection
NPR3	3	16	Boudin-mortier syndrome; Congenital contractural arachnodactyly; Marfan syndrome
SKI	3	16	Aortic aneurysm; Congenital contractural arachnodactyly; Thoracic aortic aneurysm and aortic dissection
SRFBP1	3	16	Aortic aneurysm; Congenital aneurysm of ascending aorta; Thoracic aortic aneurysm and aortic dissection
ADAMTS8	2	16	Aneurysm; Aortic aneurysm
AEBP1	2	16	Congenital contractural arachnodactyly; Ehlers-danlos syndrome
AGT	2	16	Aortic aneurysm; Mitral valve prolapse
APOE	2	16	Aneurysm; Aortic aneurysm
ARIH1	2	16	Aortic aneurysm; Marfan syndrome
CAST	2	16	Aneurysm; Aortic aneurysm
CBS	2	16	Congenital contractural arachnodactyly; Thoracic aortic aneurysm and aortic dissection
CDKN1A	2	16	Aneurysm; Aortic aneurysm
CELSR2	2	16	Aneurysm; Aortic aneurysm
COL12A1	2	16	Ehlers-danlos syndrome; Keratoconus
COL2A1	2	16	Congenital aneurysm of ascending aorta; Marfan syndrome
CSMD1	2	16	Aneurysm; Aortic aneurysm
DOT1L	2	16	Aneurysm; Aortic aneurysm
DSE	2	16	Ehlers-danlos syndrome; ehlers-danlos syndrome, musculocontractural type 2
ELN	2	16	Aortic aneurysm; Thoracic aortic aneurysm and aortic dissection
FKBP14	2	16	Congenital contractural arachnodactyly; Ehlers-danlos syndrome

Gene	Member Diseases Linked	Cluster Size	Linked Diseases
GDF7	2	16	Aneurysm; Aortic aneurysm
HCN4	2	16	Marfan syndrome; Thoracic aortic aneurysm and aortic dissection
HEY2	2	16	Marfan syndrome; Thoracic aortic aneurysm and aortic dissection
JAG1	2	16	Marfan syndrome; Thoracic aortic aneurysm and aortic dissection
LPA	2	16	Aneurysm; Aortic aneurysm
LRP1	2	16	Aneurysm; Aortic aneurysm
LTBP2	2	16	Marfan syndrome; Mitral valve prolapse
MED12	2	16	Ehlers-danlos syndrome; Thoracic aortic aneurysm and aortic dissection
MMP13	2	16	Aneurysm; Aortic aneurysm
MMP2	2	16	Aortic aneurysm; Marfan syndrome
MMP9	2	16	Aortic aneurysm; Marfan syndrome
MRC2	2	16	Aneurysm; Aortic aneurysm
PLCE1	2	16	Aneurysm; Aortic aneurysm
PMEPA1	2	16	Congenital contractural arachnodactyly; Marfan syndrome
PSRC1	2	16	Aneurysm; Aortic aneurysm
ROBO4	2	16	Aortic aneurysm; Thoracic aortic aneurysm and aortic dissection
SLC39A13	2	16	Ehlers-danlos syndrome; Mitral valve prolapse
SMAD4	2	16	Marfan syndrome; Thoracic aortic aneurysm and aortic dissection
SOD2	2	16	Aortic aneurysm; Marfan syndrome
SPSB1	2	16	Aneurysm; Aortic aneurysm
THSD1	2	16	Aneurysm; Aortic aneurysm
ZNF335	2	16	Aneurysm; Aortic aneurysm
ZNF469	2	16	Ehlers-danlos syndrome; Keratoconus
ZPR1	2	16	Aneurysm; Aortic aneurysm