

GeDiPNet Cluster 13 -- 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: 142 · Generated: 2026-10-07 01:45:12

Gene	Member Diseases Linked	Cluster Size	Linked Diseases
DYNC1H1	12	23	Amyotrophic lateral sclerosis; Charcot-marie-tooth disease; Congenital pes cavus; Dejerine-sottas disease; Distal hereditary motor neuropathy; Distal spinal muscular atrophy; Hereditary motor and sensory neuropathies; Hypertrophic neuropathy; Motor neuron disease; Peroneal muscle atrophy; Roussy-levy syndrome; Spinal muscular atrophy
GARS1	12	23	Charcot-marie-tooth disease; Charcot-Marie-Tooth disease type 2D; Congenital pes cavus; Dejerine-sottas disease; Distal hereditary motor neuropathy; Distal spinal muscular atrophy; Hereditary motor and sensory neuropathies; Hypertrophic neuropathy; Motor neuron disease; Peroneal muscle atrophy; Roussy-levy syndrome; Spinal muscular atrophy
NEFL	12	23	Amyotrophic lateral sclerosis; Charcot-marie-tooth disease; Charcot-Marie-Tooth disease type 2; Congenital pes cavus; Dejerine-sottas disease; Distal hereditary motor neuropathy; Distal spinal muscular atrophy; Hereditary motor and sensory neuropathies; Hypertrophic neuropathy; Motor neuron disease; Peroneal muscle atrophy; Roussy-levy syndrome
PLEKHG5	11	23	Amyotrophic lateral sclerosis; Charcot-marie-tooth disease; Dejerine-sottas disease; Distal hereditary motor neuropathy; Distal spinal muscular atrophy; Hereditary motor and sensory neuropathies; Hypertrophic neuropathy; Motor neuron disease; Peroneal muscle atrophy; Roussy-levy syndrome; Spinal muscular atrophy
TRPV4	10	23	Charcot-marie-tooth disease; Dejerine-sottas disease; Distal hereditary motor neuropathy; Distal spinal muscular atrophy; Hereditary motor and sensory neuropathies; Hypertrophic neuropathy; Motor neuron disease; Peroneal muscle atrophy; Roussy-levy syndrome; Spinal muscular atrophy
HSPB1	9	23	Charcot-marie-tooth disease; Dejerine-sottas disease; Distal hereditary motor neuropathy; Distal spinal muscular atrophy; Hereditary motor and sensory neuropathies; Hypertrophic neuropathy; Peroneal muscle atrophy; Roussy-levy syndrome; Spinal muscular atrophy
HSPB8	9	23	Charcot-marie-tooth disease; Dejerine-sottas disease; Distal hereditary motor neuropathy; Distal spinal muscular atrophy; Hereditary motor and sensory neuropathies; Hypertrophic neuropathy; Peroneal muscle atrophy; Roussy-levy syndrome; Spinal muscular atrophy
MPZ	9	23	Charcot-marie-tooth disease; Congenital pes cavus; Dejerine-sottas disease; Distal hereditary motor neuropathy; Hereditary motor and sensory neuropathies; Hypertrophic neuropathy; Motor neuron disease; Peroneal muscle atrophy; Roussy-levy syndrome
SH3TC2	9	23	Charcot-marie-tooth disease; Congenital pes cavus; Dejerine-sottas disease; Distal spinal muscular atrophy; Hereditary motor and sensory neuropathies; Hypertrophic neuropathy; Motor neuron disease; Peroneal muscle atrophy; Roussy-levy syndrome
FIG4	8	23	Amyotrophic lateral sclerosis; Charcot-marie-tooth disease; Dejerine-sottas disease; Distal hereditary motor neuropathy; Hereditary motor and sensory neuropathies; Hypertrophic neuropathy; Peroneal muscle atrophy; Roussy-levy syndrome
GJB1	8	23	Charcot-marie-tooth disease; Charcot-marie-tooth disease, x-linked; Congenital pes cavus; Dejerine-sottas disease; Hereditary motor and sensory neuropathies; Hypertrophic neuropathy; Peroneal muscle atrophy; Roussy-levy syndrome
MFN2	8	23	Amyotrophic lateral sclerosis; Charcot-marie-tooth disease; Dejerine-sottas disease; Hereditary motor and sensory neuropathies; Hypertrophic neuropathy; Motor neuron disease; Peroneal muscle atrophy; Roussy-levy syndrome
PDK3	8	23	Charcot-marie-tooth disease; Charcot-Marie-Tooth disease X-linked dominant 6; Charcot-marie-tooth disease, x-linked; Dejerine-sottas disease; Hereditary motor and sensory neuropathies; Hypertrophic neuropathy; Peroneal muscle atrophy; Roussy-levy syndrome
SBF1	8	23	Charcot-marie-tooth disease; Charcot-Marie-Tooth disease type 4B3; Charcot-marie-tooth disease, x-linked; Dejerine-sottas disease; Hereditary motor and sensory neuropathies; Hypertrophic neuropathy; Peroneal muscle atrophy; Roussy-levy syndrome
AARS1	7	23	Charcot-marie-tooth disease; Dejerine-sottas disease; Distal spinal muscular atrophy; Hereditary motor and sensory neuropathies; Hypertrophic neuropathy; Peroneal muscle atrophy; Roussy-levy syndrome
AIFM1	7	23	Charcot-marie-tooth disease; Charcot-marie-tooth disease, x-linked; Dejerine-sottas disease; Hereditary motor and sensory neuropathies; Hypertrophic neuropathy; Peroneal muscle atrophy; Roussy-levy syndrome
GDAP1	7	23	Charcot-marie-tooth disease; Congenital pes cavus; Dejerine-sottas disease; Hereditary motor and sensory neuropathies; Hypertrophic neuropathy; Peroneal muscle atrophy; Roussy-levy syndrome
KIF1B	7	23	Charcot-marie-tooth disease; Dejerine-sottas disease; Hereditary motor and sensory neuropathies; Hypertrophic neuropathy; Peroneal muscle atrophy; Roussy-levy syndrome; Spinal muscular atrophy
LRSAM1	7	23	Charcot-marie-tooth disease; Charcot-Marie-Tooth disease axonal type 2P; Dejerine-sottas disease; Hereditary motor and sensory neuropathies; Hypertrophic neuropathy; Peroneal muscle atrophy; Roussy-levy syndrome
MARS1	7	23	Charcot-marie-tooth disease; Dejerine-sottas disease; Distal spinal muscular atrophy; Hereditary motor and sensory neuropathies; Hypertrophic neuropathy; Peroneal muscle atrophy; Roussy-levy syndrome
PMP22	7	23	Charcot-marie-tooth disease; Dejerine-sottas disease; Distal spinal muscular atrophy; Hereditary motor and sensory neuropathies; Hypertrophic neuropathy; Peroneal muscle atrophy; Roussy-levy syndrome

Gene	Member Diseases Linked	Cluster Size	Linked Diseases
PRPS1	7	23	Charcot-marie-tooth disease; Charcot-marie-tooth disease, x-linked; Dejerine-sottas disease; Hereditary motor and sensory neuropathies; Hypertrophic neuropathy; Peroneal muscle atrophy; Roussy-levy syndrome
PRX	7	23	Charcot-marie-tooth disease; Dejerine-sottas disease; Distal spinal muscular atrophy; Hereditary motor and sensory neuropathies; Hypertrophic neuropathy; Peroneal muscle atrophy; Roussy-levy syndrome
VCP	7	23	Amyotrophic lateral sclerosis; Charcot-marie-tooth disease; Dejerine-sottas disease; Hereditary motor and sensory neuropathies; Hypertrophic neuropathy; Peroneal muscle atrophy; Roussy-levy syndrome
COX6A1	6	23	Charcot-marie-tooth disease; Dejerine-sottas disease; Hereditary motor and sensory neuropathies; Hypertrophic neuropathy; Peroneal muscle atrophy; Roussy-levy syndrome
DCTN1	6	23	Amyotrophic lateral sclerosis; Charcot-marie-tooth disease; Distal hereditary motor neuropathy; Distal spinal muscular atrophy; Hereditary motor and sensory neuropathies; Motor neuron disease
DHTKD1	6	23	Charcot-marie-tooth disease; Dejerine-sottas disease; Hereditary motor and sensory neuropathies; Hypertrophic neuropathy; Peroneal muscle atrophy; Roussy-levy syndrome
EGR2	6	23	Charcot-marie-tooth disease; Dejerine-sottas disease; Hereditary motor and sensory neuropathies; Hypertrophic neuropathy; Peroneal muscle atrophy; Roussy-levy syndrome
FGD4	6	23	Charcot-marie-tooth disease; Dejerine-sottas disease; Hereditary motor and sensory neuropathies; Hypertrophic neuropathy; Peroneal muscle atrophy; Roussy-levy syndrome
GNB4	6	23	Charcot-marie-tooth disease; Dejerine-sottas disease; Hereditary motor and sensory neuropathies; Hypertrophic neuropathy; Peroneal muscle atrophy; Roussy-levy syndrome
HK1	6	23	Charcot-marie-tooth disease; Dejerine-sottas disease; Hereditary motor and sensory neuropathies; Hypertrophic neuropathy; Peroneal muscle atrophy; Roussy-levy syndrome
IGHMBP2	6	23	Charcot-marie-tooth disease; Distal hereditary motor neuropathy; Distal spinal muscular atrophy; Hereditary motor and sensory neuropathies; Motor neuron disease; Spinal muscular atrophy
INF2	6	23	Charcot-marie-tooth disease; Dejerine-sottas disease; Hereditary motor and sensory neuropathies; Hypertrophic neuropathy; Peroneal muscle atrophy; Roussy-levy syndrome
JPH1	6	23	Charcot-marie-tooth disease; Dejerine-sottas disease; Hereditary motor and sensory neuropathies; Hypertrophic neuropathy; Peroneal muscle atrophy; Roussy-levy syndrome
KARS1	6	23	Charcot-marie-tooth disease; Dejerine-sottas disease; Hereditary motor and sensory neuropathies; Hypertrophic neuropathy; Peroneal muscle atrophy; Roussy-levy syndrome
MME	6	23	Charcot-marie-tooth disease; Dejerine-sottas disease; Hereditary motor and sensory neuropathies; Hypertrophic neuropathy; Peroneal muscle atrophy; Roussy-levy syndrome
NDRG1	6	23	Charcot-marie-tooth disease; Dejerine-sottas disease; Hereditary motor and sensory neuropathies; Hypertrophic neuropathy; Peroneal muscle atrophy; Roussy-levy syndrome
SETX	6	23	Amyotrophic lateral sclerosis; Charcot-marie-tooth disease; Distal hereditary motor neuropathy; Distal spinal muscular atrophy; Hereditary motor and sensory neuropathies; Motor neuron disease
SLC12A6	6	23	Charcot-marie-tooth disease; Dejerine-sottas disease; Hereditary motor and sensory neuropathies; Hypertrophic neuropathy; Peroneal muscle atrophy; Roussy-levy syndrome
SURF1	6	23	Charcot-marie-tooth disease; Dejerine-sottas disease; Hereditary motor and sensory neuropathies; Hypertrophic neuropathy; Peroneal muscle atrophy; Roussy-levy syndrome
TRIM2	6	23	Charcot-marie-tooth disease; Dejerine-sottas disease; Hereditary motor and sensory neuropathies; Hypertrophic neuropathy; Peroneal muscle atrophy; Roussy-levy syndrome
DNAJB2	5	23	Charcot-marie-tooth disease; Charcot-marie-tooth disease, x-linked; Distal hereditary motor neuropathy; neuronopathy, distal hereditary motor, autosomal recessive 5; Spinal muscular atrophy
HSPB3	5	23	Charcot-marie-tooth disease; Distal hereditary motor neuropathy; Distal spinal muscular atrophy; Hereditary motor and sensory neuropathies; Spinal muscular atrophy
SIGMAR1	5	23	Amyotrophic lateral sclerosis; Charcot-marie-tooth disease; Distal hereditary motor neuropathy; Distal spinal muscular atrophy; Spinal muscular atrophy
ATP7A	4	23	Charcot-marie-tooth disease; Distal hereditary motor neuropathy; Hereditary motor and sensory neuropathies; Spinal muscular atrophy
BICD2	4	23	Amyotrophic lateral sclerosis; Charcot-marie-tooth disease; Distal hereditary motor neuropathy; Spinal muscular atrophy
BSCL2	4	23	Charcot-marie-tooth disease; Distal hereditary motor neuropathy; Distal spinal muscular atrophy; Hereditary motor and sensory neuropathies
DRP2	4	23	Charcot-marie-tooth disease; Charcot-marie-tooth disease, x-linked; Hereditary motor and sensory neuropathies; X-linked hereditary motor and sensory neuropathy
FBXO38	4	23	Charcot-marie-tooth disease; Distal hereditary motor neuropathy; Distal spinal muscular atrophy; Spinal muscular atrophy

Gene	Member Diseases Linked	Cluster Size	Linked Diseases
MORC 2	4	23	Charcot-marie-tooth disease; Distal hereditary motor neuropathy; Distal spinal muscular atrophy; Hereditary motor and sensory neuropathies
NEFH	4	23	Amyotrophic lateral sclerosis; Charcot-marie-tooth disease; Hereditary motor and sensory neuropathies; Motor neuron disease
SLC5A 7	4	23	Charcot-marie-tooth disease; Distal hereditary motor neuropathy; Distal spinal muscular atrophy; Hereditary motor and sensory neuropathies
VRK1	4	23	Amyotrophic lateral sclerosis; Distal hereditary motor neuropathy; Distal spinal muscular atrophy; Spinal muscular atrophy
BAG3	3	23	Charcot-marie-tooth disease; Distal hereditary motor neuropathy; Distal spinal muscular atrophy
KIF5A	3	23	Amyotrophic lateral sclerosis; Charcot-marie-tooth disease; Hereditary motor and sensory neuropathies
LITAF	3	23	Charcot-marie-tooth disease; Distal spinal muscular atrophy; Hereditary motor and sensory neuropathies
LMNA	3	23	Charcot-marie-tooth disease; Distal hereditary motor neuropathy; Hereditary motor and sensory neuropathies
RAB7A	3	23	Charcot-marie-tooth disease; Charcot-Marie-Tooth disease type 2; Hereditary motor and sensory neuropathies
REEP1	3	23	Charcot-marie-tooth disease; Distal hereditary motor neuropathy; Spinal muscular atrophy
WARS 1	3	23	Charcot-marie-tooth disease; Distal hereditary motor neuropathy; Distal spinal muscular atrophy
ALS2	2	23	Amyotrophic lateral sclerosis; Motor neuron disease
ARHG EF10	2	23	Charcot-marie-tooth disease; Spinal muscular atrophy
BCL2L 1	2	23	Amyotrophic lateral sclerosis; Motor neuron disease
BSG	2	23	Amyotrophic lateral sclerosis; Motor neuron disease
CALB2	2	23	Amyotrophic lateral sclerosis; Motor neuron disease
CASP1	2	23	Amyotrophic lateral sclerosis; Motor neuron disease
CD68	2	23	Amyotrophic lateral sclerosis; Motor neuron disease
CD7	2	23	Amyotrophic lateral sclerosis; Motor neuron disease
CHCH D10	2	23	Amyotrophic lateral sclerosis; Spinal muscular atrophy
CLU	2	23	Amyotrophic lateral sclerosis; Motor neuron disease
CNTF	2	23	Amyotrophic lateral sclerosis; Motor neuron disease
CREBB P	2	23	Amyotrophic lateral sclerosis; Motor neuron disease
CST3	2	23	Amyotrophic lateral sclerosis; Motor neuron disease
CTSD	2	23	Amyotrophic lateral sclerosis; Motor neuron disease
DBX1	2	23	Amyotrophic lateral sclerosis; Motor neuron disease
DPP6	2	23	Amyotrophic lateral sclerosis; Spinal muscular atrophy
DST	2	23	Charcot-marie-tooth disease; Distal spinal muscular atrophy
ETFDH	2	23	Distal spinal muscular atrophy; multiple acyl-CoA dehydrogenase deficiency

Gene	Member Diseases Linked	Cluster Size	Linked Diseases
FGF6	2	23	Amyotrophic lateral sclerosis; Motor neuron disease
FMO1	2	23	Amyotrophic lateral sclerosis; Motor neuron disease
FOS	2	23	Amyotrophic lateral sclerosis; Motor neuron disease
FUS	2	23	Amyotrophic lateral sclerosis; Distal spinal muscular atrophy
GABRA1	2	23	Amyotrophic lateral sclerosis; Motor neuron disease
GBX2	2	23	Amyotrophic lateral sclerosis; Motor neuron disease
GDI1	2	23	Amyotrophic lateral sclerosis; Motor neuron disease
GFAP	2	23	Amyotrophic lateral sclerosis; Motor neuron disease
GRIA3	2	23	Amyotrophic lateral sclerosis; Motor neuron disease
GSX2	2	23	Amyotrophic lateral sclerosis; Motor neuron disease
HARS1	2	23	Charcot-marie-tooth disease; Congenital pes cavus
HOXD10	2	23	Amyotrophic lateral sclerosis; Charcot-marie-tooth disease
HSF1	2	23	Amyotrophic lateral sclerosis; Motor neuron disease
IFRD1	2	23	Amyotrophic lateral sclerosis; Charcot-marie-tooth disease
INA	2	23	Amyotrophic lateral sclerosis; Motor neuron disease
JAK3	2	23	Amyotrophic lateral sclerosis; Motor neuron disease
JUND	2	23	Amyotrophic lateral sclerosis; Motor neuron disease
KIF3C	2	23	Amyotrophic lateral sclerosis; Motor neuron disease
LAMA2	2	23	Amyotrophic lateral sclerosis; Charcot-marie-tooth disease
LAT	2	23	Amyotrophic lateral sclerosis; Motor neuron disease
LDLR	2	23	Amyotrophic lateral sclerosis; Motor neuron disease
LRRC8C	2	23	Amyotrophic lateral sclerosis; Telangiectasia–intellectual disability–microcephaly–metaphyseal dysplasia–eye abnormalities–short stature syndrome
MED25	2	23	Charcot-marie-tooth disease; Hereditary motor and sensory neuropathies
MT1A	2	23	Amyotrophic lateral sclerosis; Motor neuron disease
NEK1	2	23	Amyotrophic lateral sclerosis; Motor neuron disease
NRG1	2	23	Amyotrophic lateral sclerosis; Charcot-marie-tooth disease
OPTN	2	23	Amyotrophic lateral sclerosis; Motor neuron disease
PARK7	2	23	Amyotrophic lateral sclerosis; Motor neuron disease
PDGFA	2	23	Amyotrophic lateral sclerosis; Motor neuron disease
PENK	2	23	Amyotrophic lateral sclerosis; Motor neuron disease
PLD3	2	23	Charcot-marie-tooth disease; Hereditary motor and sensory neuropathies

Gene	Member Diseases Linked	Cluster Size	Linked Diseases
PNPLA6	2	23	Amyotrophic lateral sclerosis; Motor neuron disease
PON1	2	23	Amyotrophic lateral sclerosis; Motor neuron disease
PRPH	2	23	Amyotrophic lateral sclerosis; Motor neuron disease
RETREG1	2	23	Charcot-marie-tooth disease; Hereditary motor and sensory neuropathies
RXRA	2	23	Amyotrophic lateral sclerosis; Motor neuron disease
SCN11A	2	23	Charcot-marie-tooth disease; Motor neuron disease
SDHC	2	23	Charcot-marie-tooth disease; Hereditary motor and sensory neuropathies
SELPLG	2	23	Amyotrophic lateral sclerosis; Motor neuron disease
SEPTIN9	2	23	Charcot-marie-tooth disease; Hereditary motor and sensory neuropathies
SERPINA3	2	23	Amyotrophic lateral sclerosis; Motor neuron disease
SHC1	2	23	Amyotrophic lateral sclerosis; Motor neuron disease
SIX2	2	23	Amyotrophic lateral sclerosis; Motor neuron disease
SLC25A46	2	23	Charcot-marie-tooth disease; Hereditary motor and sensory neuropathies
SNAI1	2	23	Amyotrophic lateral sclerosis; Motor neuron disease
SOD1	2	23	Amyotrophic lateral sclerosis; Motor neuron disease
SORD	2	23	Charcot-marie-tooth disease; Distal hereditary motor neuropathy
SPG11	2	23	Amyotrophic lateral sclerosis; Charcot-marie-tooth disease
SPTAN1	2	23	Distal hereditary motor neuropathy; Distal spinal muscular atrophy
SPTLC1	2	23	Amyotrophic lateral sclerosis; Charcot-marie-tooth disease
SPTLC2	2	23	Amyotrophic lateral sclerosis; Charcot-marie-tooth disease
TARDBP	2	23	Amyotrophic lateral sclerosis; Motor neuron disease
TBK1	2	23	Amyotrophic lateral sclerosis; Motor neuron disease
TFG	2	23	Charcot-marie-tooth disease; Hereditary motor and sensory neuropathies
TIAM1	2	23	Amyotrophic lateral sclerosis; Motor neuron disease
TLE3	2	23	Amyotrophic lateral sclerosis; Motor neuron disease
TMSB4X	2	23	Amyotrophic lateral sclerosis; Motor neuron disease

Gene	Member Diseases Linked	Cluster Size	Linked Diseases
TNF	2	23	Amyotrophic lateral sclerosis; Motor neuron disease
UBA1	2	23	Spinal muscular atrophy; Vexas syndrome
VAPB	2	23	Amyotrophic lateral sclerosis; Spinal muscular atrophy
VIM	2	23	Amyotrophic lateral sclerosis; Motor neuron disease
WNK1	2	23	Charcot-marie-tooth disease; Hereditary motor and sensory neuropathies
WNT7A	2	23	Amyotrophic lateral sclerosis; Motor neuron disease
XIAP	2	23	Amyotrophic lateral sclerosis; Motor neuron disease