

GeDiPNet Shared-Gene Disease Pairs

Similarity: Jaccard index on shared curated genes (disease_gdp). Significance: upper-tail hypergeometric test ($P(X \geq k)$), Benjamini-Hochberg FDR-corrected across all tested pairs. Corroborated Shared Genes: count of shared genes backed by ≥ 2 distinct disease_gdp.main_source values combined across both diseases (e.g. GWAS-backed for one, ClinVar-backed for the other still counts); Shared Gene Names lists each gene's own source count in parentheses. Overlap Coefficient: shared genes / MIN(each disease's own total gene count) -- complements the Jaccard-based Similarity Score by showing how much of the SMALLER disease's entire known gene-set is covered by this pair, which Jaccard (dividing by the union) can understate. Shared Cluster: cluster id if both diseases fall in the same label-propagation cluster (scripts/build_disease_clusters.php), blank otherwise. See scripts/build_related.php on gedipnet.bicnirrh.res.in. Data as of: 2026-10-10 03:00:13. Filters applied: disease name contains "Ap4-related intellectual disability and spastic paraplegia" (5 matching pairs). · Rows: 5 · Generated: 2026-10-10 01:38:30

Disease A	Disease B	Shared Genes	Corroborated Shared Genes	Shared Gene Names	Similarity Score	Overlap Coefficient	P-value	FDR Q-value	Shared Cluster
Ap4-related intellectual disability and spastic paraplegia	Brain atrophy	1	1	AP4M1 (2)	0.07143	0.25000	2.595e-3	3.514e-3	
Ap4-related intellectual disability and spastic paraplegia	Spastic paraplegia	4	4	AP4M1 (3), AP4B1 (4), AP4E1 (4), AP4S1 (4)	0.03306	1.00000	3.508e-9	2.999e-8	
Ap4-related intellectual disability and spastic paraplegia	Hereditary spastic paraplegia	4	4	AP4M1 (2), AP4B1 (2), AP4E1 (2), AP4S1 (2)	0.03922	1.00000	1.744e-9	1.546e-8	
Ap4-related intellectual disability and spastic paraplegia	Intellectual disability	4	4	AP4M1 (3), AP4B1 (3), AP4E1 (3), AP4S1 (3)	0.05195	1.00000	5.480e-10	5.089e-9	
Ap-4 deficiency syndrome	Ap4-related intellectual disability and spastic paraplegia	4	4	AP4M1 (2), AP4B1 (2), AP4E1 (2), AP4S1 (2)	0.80000	1.00000	4.271e-16	6.517e-15	