

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: 2026-10-12 03:00:13. Filters applied: disease name contains "Branched-chain keto acid dehydrogenase kinase deficiency" (5 matching pairs). · Rows: 5 · Generated: 2026-10-12 05:12:24

Disease A	Disease B	Shared Genes	Corroborated Shared Genes	Shared Gene Names	Similarity Score	Overlap Coefficient	P-value	FDR Q-value	Shared Cluster
Autism-epilepsy syndrome	Branched-chain keto acid dehydrogenase kinase deficiency	1	1	BCKDK (6)	0.50000	1.00000	6.494e-5	2.331e-4	
Branched-chain keto acid dehydrogenase kinase deficiency	Maple syrup urine disease	1	1	BCKDK (5)	0.12500	1.00000	4.546e-4	9.726e-4	
Branched-chain keto acid dehydrogenase kinase deficiency	Parkinson disease	1	1	BCKDK (6)	0.00189	1.00000	3.436e-2	3.633e-2	
Branched-chain keto acid dehydrogenase kinase deficiency	Intellectual developmental disorder	1	1	BCKDK (5)	0.00123	1.00000	5.254e-2	5.421e-2	
Autism	Branched-chain keto acid dehydrogenase kinase deficiency	1	1	BCKDK (5)	0.00068	1.00000	9.501e-2	9.603e-2	