

**Supplementary Table s2. Functional association evidence and computing methods.**

Feature	Data source/ Data set	Statistics
Shared Annotation	GOC	Cellular component Biological process Molecular function
Homologous Interactions	Inparanoid Score	Maximum
Domain Interaction	IDDI	3DID IPFAM PINS TW HIMAP DOMAINGA PVALUE IPPRI RCDP DIPD RDFF DPEA ME PE DIMA_STRING KGIDDI LLZ GPE DIMA_DPROF APMM TOPDOWN DIMA_DPEA INTERDOM
Co-localization	Compartments	Knowledge channel Experiments channel Text mining channel Predictions channel
Co-expression	COXPRESdb	Microarray RNASeq
Phylogenetic Profile	DIOPT	Mutual Information Score Pearson's Correlation Score Tanimoto Correlation Score