

**Table S1. Evidence of functional association and methods to compute feature values.**

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