

Table S4 Ubiquitous domain families with their tethering numbers and fraction of eukaryotes, bacteria and archae containing the domain families
 fraction = Number of organisms in a kingdom containing the co-occurring domain family/total number of organisms in the respective kingdom

Tethering number	fraction of	fraction of	fraction of	Archaea
IPR003593	446	0.74	0.95	0.92
IPR017442	445	0.7	0.61	0.69
IPR019734	280	0.64	0.75	0.67
IPR001650	272	0.67	0.95	0.9
IPR014001	264	0.68	0.95	0.9
IPR001440	236	0.64	0.7	0.61
IPR003594	204	0.67	0.93	0.9
IPR000182	198	0.63	0.92	0.9
IPR001478	182	0.58	0.92	0.59
IPR002035	169	0.61	0.71	0.71
IPR011701	167	0.67	0.94	0.9
IPR001387	153	0.55	0.89	0.9
IPR002198	152	0.66	0.93	0.73
IPR005135	147	0.58	0.87	0.53
IPR013216	143	0.61	0.9	0.88
IPR000873	142	0.62	0.87	0.78
IPR001254	137	0.57	0.92	0.57
IPR013027	134	0.61	0.95	0.92
IPR000073	125	0.65	0.88	0.61
IPR005834	116	0.66	0.94	0.9
IPR000209	115	0.61	0.59	0.67
IPR001450	113	0.58	0.85	0.92
IPR004843	112	0.63	0.92	0.9
IPR001173	107	0.63	0.9	0.9
IPR000644	93	0.61	0.94	0.9
IPR001763	91	0.6	0.89	0.69
IPR001296	88	0.6	0.9	0.9
IPR006076	84	0.59	0.87	0.69
IPR000086	81	0.61	0.91	0.88
IPR013766	81	0.64	0.93	0.76
IPR003607	73	0.59	0.92	0.9
IPR003439	68	0.61	0.93	0.82
IPR000795	67	0.64	0.95	0.9
IPR001279	66	0.58	0.94	0.9
IPR013149	66	0.6	0.83	0.69
IPR001509	64	0.59	0.9	0.88
IPR002938	63	0.55	0.69	0.73
IPR000449	61	0.56	0.93	0.73
IPR001433	59	0.64	0.81	0.57
IPR006094	59	0.52	0.91	0.59
IPR004365	58	0.58	0.95	0.9
IPR004087	56	0.65	0.94	0.88
IPR013154	56	0.6	0.83	0.67
IPR004839	55	0.63	0.93	0.9
IPR006680	55	0.54	0.91	0.9
IPR003953	54	0.53	0.87	0.84
SM00316	54	0.59	0.95	0.9
IPR001041	53	0.58	0.81	0.75
IPR008333	51	0.55	0.76	0.53
IPR002937	50	0.57	0.62	0.63