

S2 Table. Percentage of identity, DNASTAR analysis

*Sequence Distances of Untitled ClustalW (Slow/Accurate, Gonnet)

*Upper triangle shows identity percentage

*Lower triangle shows divergence percentage

Percent Identity																																															
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43					
1		1000	1000	1000	804	713	713	727	608	497	326	326	319	161	159	148	264	198	194	209	183	262	310	7.8	24.4	173	248	246	181	203	264	164	188	250	243	185	270	14.3	20.6	255	243	273	245	1	NP_216547.1		
2	0.0		1000	1000	804	713	713	727	608	497	326	326	319	161	159	148	264	198	194	209	183	262	310	7.8	24.4	173	248	246	181	203	264	164	188	250	243	185	270	14.3	20.6	255	243	273	245	2	NP_855707.1		
3	0.0	0.0		1000	804	713	713	727	608	497	326	326	319	161	159	148	264	198	194	209	183	262	310	7.8	24.4	173	248	246	181	203	264	164	188	250	243	185	270	14.3	20.6	255	243	273	245	3	YP_978140.1		
4	0.0	0.0	0.0		804	713	713	727	608	497	326	326	319	161	159	148	264	198	194	209	183	262	310	7.6	24.4	173	248	246	181	203	264	164	188	250	243	185	270	14.3	20.6	255	243	273	245	4	YP_003031913.1		
5	22.7	22.7	22.7	22.7		676	769	669	648	486	284	284	277	162	161	134	274	198	194	201	198	254	302	9.2	23.6	165	281	254	190	188	274	173	174	250	304	194	293	16.7	23.0	255	252	283	252	5	ZP_07449296.1		
6	36.1	36.1	36.1	36.1	42.3		627	720	622	490	305	305	301	290	176	157	266	231	218	203	240	248	287	107	26.8	16.7	289	278	161	226	266	154	212	266	267	185	300	16.5	21.3	243	266	299	283	6	YP_001851758		
7	36.1	36.1	36.1	36.1	27.6	51.3		655	627	472	291	291	284	169	165	153	134	218	183	179	242	198	246	287	113	24.0	180	264	231	153	203	218	150	167	236	252	163	279	159	185	270	252	236	252	7	ZP_06852400.1	
8	33.9	33.9	33.9	33.9	43.5	35.0	46.0		587	483	340	348	348	206	204	197	290	151	165	203	208	256	333	107	27.6	18.8	240	286	153	219	290	172	226	216	252	215	279	165	206	243	266	276	246	8	ZP_0750177.1		
9	54.9	54.9	54.9	54.9	47.3	52.1	51.3	59.2		479	298	298	312	174	123	203	238	176	201	224	222	238	285	121	29.3	17.4	254	224	165	204	238	221	196	266	272	235	291	185	210	272	250	256	275	9	YP_888221.1		
10	80.8	80.8	80.8	80.8	83.7	82.7	87.7	84.6	85.6		284	284	287	162	122	179	207	192	203	218	192	216	240	136	220	181	264	293	119	234	207	186	190	252	252	176	235	174	153	257	284	276	268	10	YP_954722.1		
11	144.6	144.6	144.6	144.6	170.9	156.9	166.0	137.3	161.3	170.9		99.3	87.7	19.1	19.1	19.1	73	222	200	188	225	135	214	239	103	242	190	279	188	122	202	244	212	252	283	227	28.7	19.4	175	221	282	239	31	NP_962635.1			
12	144.6	144.6	144.6	144.6	170.9	156.9	166.0	137.3	161.3	170.9	87.7		87.0	19.1	19.1	19.1	90	165	214	193	181	177	127	206	231	103	242	183	279	181	122	200	214	244	212	252	275	227	28.0	19.4	175	221	275	231	239	12	ZP_05218681.1
13	148.5	148.5	148.5	148.5	176.1	148.5	170.9	139.8	152.6	176.1	135	143		21.3	21.3	21.3	218	206	200	174	254	143	206	254	117	242	190	262	196	122	200	246	237	190	252	283	220	294	194	175	214	254	246	39	ZP_05225418.1		
14	307.0	307.0	307.0	313.0	305.0	298.0	291.0	298.0	284.0	296.0	257.0	248.0	230.0		57.7	45.4	160	177	180	170	167	121	189	9.8	160	141	250	212	141	136	160	147	176	146	213	136	209	164	162	146	203	136	153	14	NP_000385.1		
15	309.0	309.0	309.0	315.0	307.0	301.0	321.0	304.0	403.0	407.0	249.0	260.0	224.0	61.3		50.0	15.7	160	135	166	156	132	157	112	182	14.6	21.5	15.9	12.5	14.6	157	145	203	11.6	182	161	174	159	12.8	15.2	181	141	102	15	NP_001876.1		
16	332.0	332.0	332.0	362.0	371.0	313.0	321.0	250.0	241.0	274.0	284.0	298.0	271.0	93.1	79.9		15.6	154	157	170	164	131	123	9.6	15.8	17.0	19.1	20.6	10.5	13.6	156	133	167	109	162	164	184	159	12.8	11.6	192	147	156	16	NP_653218.1		
17	186.0	186.0	186.0	187.8	177.9	184.3	226.0	166.3	205.0	237.0	220.0	229.0	238.0	307.0	315.0	317.0		20.9	21.7	234	228	209	30.6	11.6	22.4	19.4	21.6	32.8	16.3	25.4	100.0	14.6	14.6	26.8	31.1	16.4	22.3	13.2	12.7	19.5	25.0	25.4	17	YP_00250348.1			
18	248.0	248.0	248.0	250.0	228.0	212.0	268.0	228.0	281.0	255.0	246.0	255.0	246.0	279.0	307.0	319.0	234.0		30.0	35.6	29.5	39.2	25.9	21.1	19.7	20.8	29.5	14.6	21.8	20.9	143	193	193	252	183	281	11.3	14.8	26.1	25.6	231	18	Q57733.1				
19	253.0	253.0	253.0	255.0	225.0	224.0	274.0	298.0	244.0	241.0	261.0	271.0	284.0	273.0	365.0	313.0	226.0	159.9		32.9	28.3	31.5	25.9	17.9	21.1	20.7	20.8	36.8	13.7	24.4	21.7	14.7	15.3	22.5	31.0	16.5	21.3	15.6	12.3	25.0	30.7	24.8	26.3	19	AAB85357.1		
20	236.0	236.0	236.0	248.0	244.0	241.0	219.0	241.0	219.0	224.0	218.0	226.0	195.0	289.0	289.0	289.0	209.0	129.7	143.3		37.5	39.0	32.8	18.8	26.2	19.0	27.3	40.1	106	254	234	124	16.8	21.0	33.1	11.9	23.1	11.0	10.7	22.9	24.5	270	20	NP_143673.1			
21	270.0	270.0	270.0	276.0	248.0	240.0	248.0	237.0	220.0	257.0	263.0	393.0	347.0	296.0	315.0	296.0	214.0	163.5	171.0	121.4		45.9	32.8	20.1	24.1	19.6	25.4	32.5	15.9	20.0	22.8	164	18.8	16.7	31.5	16.5	20.8	15.7	14.5	18.3	22.0	22.4	24.1	21	NP_148279.2		
22	187.8	187.8	187.8	193.1	194.7	197.0	198.0	192.0	205.0	228.0	229.0	238.0	238.0	410.0	377.0	380.0	296.0	114.4	110.9	115.2	91.6		36.1	22.7	26.5	22.9	29.6	36.5	134	238	209	164	15.8	15.9	31.2	19.0	22.3	12.4	14.0	25.2	20.5	20.8	22	NP_070125.1			
23	153.8	153.8	153.8	153.8	158.7	168.7	187.0	140.9	170.0	203.0	205.0	211.0	194.9	261.0	313.0	219.0	155.9	190.0	190.3	143.4	143.8	127.7		17.9	23.0	20.7	22.7	38.1	15.0	24.0	30.6	20.5	15.9	24.2	32.4	18.5	31.9	20.5	16.4	24.6	26.7	30.5	28.2	23	NP_070795.1		
24	736.0	736.0	736.0	796.0	569.0	471.0	442.0	471.0	414.0	365.0	493.0	426.0	531.0	451.0	538.0	430.0	224.0	274.0	261.0	240.0	276.0	276.0		13.7	14.7	16.4	17.4	15.9	17.1	11.6	12.9	10.8	9.0	18.1	14.6	10.8	12.9	12.7	12.2	9.6	12.8	17.4	24	CAC11631.1			
25	200.0	200.0	200.0	200.0	208.0	182.5	200.0	176.2	164.7	223.0	202.0	202.0	202.0	208.0	209.0	271.0	313.0	218.0	232.0	232.0	187.4	202.0	184.8	210.0	360.0		19.5	23.3	26.0	15.6	22.3	22.4	32.8	18.7	31.5	19.5	17.1	14.2	14.8	28.1	18.9	23.5	23.8	25	CAC11993.1		
26	285.0	285.0	285.0	299.0	288.0	296.0	274.0	261.0	284.0	271.0	258.0	268.0	258.0	352.0	330.0	289.0	254.0	249.0	237.0	260.0	252.0	214.0	237.0	337.0	252.0		22.7	22.3	10.6	19.7	19.4	13.3	12.8	18.2	22.5	17.6	19.2	14.9	13.1	16.7	21.4	19.5	21.1	26	AAG2000.1		
27	197.0	197.0	197.0	197.0	172.8	167.0	185.6	204.0	194.0	185.6	174.5	174.5	187.4	195.0	229.0	258.0	228.0	236.0	236.0	179.0	194.4	162.7	216.0	301.0	210.0	216.0		26.7	14.9	16.1	21.6	22.7	21.8	24.2	28.1	17.9	28.9	19.3	16.5	20.2	21.0	24.4	27	AAG20865.1			
28	198.0	198.0	198.0	198.0	194.9	174.9	211.0	169.5	219.0	164.3	261.0	271.0	252.0	231.0	309.0	238.0	143.3	163.2	142.4	110.9	145.1	125.7	118.8	284.0	189.3	219.0	183.8		14.5	26.1	32.8	17.6	16.2	27.7	39.7	25.9	15.6	17.4	25.9	33.1	31.1	36.0	28	NP_213880.1			
29	271.0	271.0	271.0	274.0	260.0	307.0	321.0	321.0	298.0	422.0	407.0	407.0	352.0	399.0	428.0	402.0	303.0	339.0	362.0	424.0	311.0	371.0	325.0	311.0	482.0	332.0	342.0		13.9	16.3	18.1	12.9	21.4	19.7	22.5	15.7	25.7	27.7	17.6	20.5	13.8	21.6	29	BAB13269.1			
30	243.0	243.0	243.0	254.0	261.0	216.0	243.0	224.0	240.0	209.0	237.0	246.0	246.0	365.0	335.0	362.0	194.7	224.0	200.0	195.1	246.0	205.0	203.0	287.0	219.0	249.0	305.0																				