

Table S4. GenBank accession number of retroelement families identified in *C. annuum* genome

Superfam	Clade	Retroelement Family	Accession number
Copia	Ale/Retrofit	CopiaCa_01	LC434324
Copia	Ale/Retrofit	CopiaCa_02	LC434325
Copia	Ale/Retrofit	CopiaCa_05	LC434326
Copia	Ale/Retrofit	CopiaCa_08	LC434327
Copia	Ale/Retrofit	CopiaCa_13	LC434328
Copia	Ale/Retrofit	CopiaCa_16	LC434329
Copia	Ale/Retrofit	CopiaCa_18	LC434330
Copia	Ale/Retrofit	CopiaCa_19	LC434331
Copia	Ale/Retrofit	CopiaCa_20	LC434332
Copia	Ale/Retrofit	CopiaCa_21	LC434333
Copia	Ale/Retrofit	CopiaCa_22	LC434334
Copia	Ale/Retrofit	CopiaCa_37	LC434335
Copia	Ale/Retrofit	CopiaCa_41	LC434336
Copia	Ale/Retrofit	CopiaCa_43	LC434337
Copia	Ale/Retrofit	CopiaCa_45	LC434338
Copia	Ale/Retrofit	monotypic-Ch01f_35	LC434339
Copia	Ale/Retrofit	monotypic-Ch02d_66	LC434340
Copia	Ale/Retrofit	monotypic-Ch02d_70	LC434341
Copia	Ale/Retrofit	monotypic-Ch02d_71	LC434342
Copia	Ale/Retrofit	monotypic-Ch02e_08	LC434343
Copia	Ale/Retrofit	monotypic-Ch02e_68	LC434344
Copia	Ale/Retrofit	monotypic-Ch03a_32	LC434345
Copia	Ale/Retrofit	monotypic-Ch03a_77	LC434346
Copia	Ale/Retrofit	monotypic-Ch03b_38	LC434347
Copia	Ale/Retrofit	monotypic-Ch03g_33	LC434348
Copia	Ale/Retrofit	monotypic-Ch03g_76	LC434349
Copia	Ale/Retrofit	monotypic-Ch04a_25	LC434350
Copia	Ale/Retrofit	monotypic-Ch04d_23	LC434351
Copia	Ale/Retrofit	monotypic-Ch05a_59	LC434352
Copia	Ale/Retrofit	monotypic-Ch05f_50	LC434353
Copia	Ale/Retrofit	monotypic-Ch06a_02	LC434354
Copia	Ale/Retrofit	monotypic-Ch06a_16	LC434355
Copia	Ale/Retrofit	monotypic-Ch06a_19	LC434356
Copia	Ale/Retrofit	monotypic-Ch06a_93	LC434357
Copia	Ale/Retrofit	monotypic-Ch07e_03	LC434358
Copia	Ale/Retrofit	monotypic-Ch07e_22	LC434359
Copia	Ale/Retrofit	monotypic-Ch08d_24	LC434360
Copia	Ale/Retrofit	monotypic-Ch09a_01	LC434361
Copia	Ale/Retrofit	monotypic-Ch03a_34	LC434362
Copia	Ale/Retrofit	monotypic-Ch10c_26	LC434363
Copia	Ale/Retrofit	monotypic-Ch10f_01	LC434364
Copia	Ale/Retrofit	monotypic-Ch10f_09	LC434365
Copia	Ale/Retrofit	monotypic-Ch10f_23	LC434366
Copia	Ale/Retrofit	monotypic-Ch11a_12	LC434367

Copia	Ale/Retrofit	monotypic-Ch11a_33	LC434368
Copia	Ale/Retrofit	monotypic-Ch11c_09	LC434369
Copia	Ale/Retrofit	monotypic-Ch12a_47	LC434370
Copia	Ale/Retrofit	monotypic-Ch12e_38	LC434371
Copia	Angela/Tork	CopiaCa_15	LC434372
Copia	Bianca	monotypic-Ch06a_26	LC434373
Copia	Bianca	monotypic-Ch02e_17	LC434374
Copia	GMR/Tork	CopiaCa_04	LC434375
Copia	GMR/Tork	CopiaCa_10	LC434376
Copia	GMR/Tork	CopiaCa_17	LC434377
Copia	GMR/Tork	CopiaCa_23	LC434378
Copia	GMR/Tork	CopiaCa_25	LC434379
Copia	GMR/Tork	CopiaCa_27	LC434380
Copia	GMR/Tork	CopiaCa_35	LC434381
Copia	GMR/Tork	CopiaCa_46	LC434382
Copia	Oryco/Ivana	CopiaCa_06	LC434383
Copia	Oryco/Ivana	CopiaCa_14	LC434384
Copia	Oryco/Ivana	CopiaCa_24	LC434385
Copia	Oryco/Ivana	CopiaCa_28	LC434386
Copia	Oryco/Ivana	CopiaCa_33	LC434387
Copia	Oryco/Ivana	monotypic-Ch01d_24	LC434388
Copia	Oryco/Ivana	monotypic-Ch05a_52	LC434389
Copia	Oryco/Ivana	monotypic-Ch01f_34	LC434390
Copia	Sire/Maximus	CopiaCa_03	LC434391
Copia	Tar/Tork	CopiaCa_07	LC434392
Copia	Tar/Tork	CopiaCa_09	LC434393
Copia	Tar/Tork	CopiaCa_11	LC434394
Copia	Tar/Tork	CopiaCa_12	LC434395
Copia	Tar/Tork	CopiaCa_30	LC434396
Gypsy	Athila	GypsyCa_16	LC434397
Gypsy	Athila	GypsyCa_17	LC434398
Gypsy	Athila	monotypic-Ch01e_38	LC434399
Gypsy	Athila	monotypic-Ch01f_23	LC434400
Gypsy	Athila	monotypic-Ch01h_17	LC434401
Gypsy	Athila	monotypic-Ch02c_27	LC434402
Gypsy	Athila	monotypic-Ch03b_33	LC434403
Gypsy	Athila	monotypic-Ch03e_19	LC434404
Gypsy	Athila	monotypic-Ch04e_05	LC434405
Gypsy	Athila	monotypic-Ch05e_10	LC434406
Gypsy	Athila	monotypic-Ch05f_45	LC434407
Gypsy	Athila	monotypic-Ch06f_46	LC434408
Gypsy	Athila	monotypic-Ch08d_10	LC434409
Gypsy	Athila	monotypic-Ch09a_15	LC434410
Gypsy	Athila	monotypic-Ch09a_16	LC434411
Gypsy	Athila	monotypic-Ch09b_19	LC434412
Gypsy	Athila	monotypic-Ch09e_06	LC434413
Gypsy	Athila	monotypic-Ch10c_34	LC434414
Gypsy	Athila	monotypic-Ch11a_42	LC434415

Gypsy	Athila	monotypic-Ch11a_51	LC434416
Gypsy	Athila	monotypic-Ch11d_13	LC434417
Gypsy	Athila	monotypic-Ch11f_28	LC434418
Gypsy	Athila	monotypic-Ch12a_45	LC434419
Gypsy	CRM	GypsyCa_01	LC434420
Gypsy	CRM	GypsyCa_03	LC434421
Gypsy	Del/Tekay	GypsyCa_09	LC434422
Gypsy	Del/Tekay	GypsyCa_19	LC434423
Gypsy	Del/Tekay	GypsyCa_13	LC434424
Gypsy	Del/Tekay	monotypic-Ch05d_24	LC434425
Gypsy	Del/Tekay	monotypic-Ch11a_28	LC434426
Gypsy	Del/Tekay	GypsyCa_04	LC434427
Gypsy	Galadriel	GypsyCa_02	LC434428
Gypsy	Reina	GypsyCa_14	LC434429
Gypsy	Reina	GypsyCa_15	LC434430
Gypsy	Reina	monotypic-Ch09f_70	LC434431
Gypsy	Reina	monotypic-Ch09f_57	LC434432
Gypsy	Reina	monotypic-Ch03a_23	LC434433
Gypsy	Reina	monotypic-Ch12a_43	LC434434
Gypsy	Reina	monotypic-Ch06e_21	LC434435
Gypsy	Reina	monotypic-Ch09f_24	LC434436
Gypsy	Reina	monotypic-Ch03a_41	LC434437
Gypsy	Reina	monotypic-Ch04a_43	LC434438
Gypsy	Reina	monotypic-Ch10f_29	LC434439
Gypsy	Reina	monotypic-Ch03a_05	LC434440
Gypsy	Reina	monotypic-Ch05e_34	LC434441
Gypsy	Reina	monotypic-Ch03g_96	LC434442
Gypsy	Reina	monotypic-Ch05a_58	LC434443
Gypsy	Reina	monotypic-Ch02e_84	LC434444
Gypsy	Reina	monotypic-Ch04b_28	LC434445
Gypsy	Tat	monotypic-Ch12f_40	LC434446
Gypsy	Tat	monotypic-Ch08d_60	LC434447