

group_monophyly	Topology	Bootstrap_Support	Athal_sister	Cru
FALSE	Other_topology	BS_scoreNA	Csat__psbA Bstri_NP_051039	Atha__NC_000932.1_NP_051039.1_2 Csat__psbA
FALSE	Other_topology	BS_scoreNA	Alyr__LN877383.1_CUA65385.1_3	Csat__matK Atha__NC_000932.1_NP_051040.1_3
TRUE	Other_topology	BS_scoreNA	Crub__NC_027693.1_YP_009161904.1_5 Cgra__NC_028517.1_YP_009182874.1_5 Csat__psbK	Csat__psbK Atha__NC_000932.1_NP_051040.1_3
FALSE	Other_topology	BS_scoreNA	Bstri_NP_051043 Csat__psbI Alyr__LN877383.1_CUA65388.1_6	Esal__NC_028517.1_YP_009161907.1_8
TRUE	AC_topology	68	Alyr__LN877383.1_CUA65389.1_7	Csat__psbI Atha__NC_000932.1_NP_051040.1_3
FALSE	Other_topology	BS_scoreNA	Crub__NC_027693.1_YP_009161907.1_8 Cgra__NC_028517.1_YP_009182877.1_8	Atha__NC_000932.1_NP_051040.1_3
TRUE	BC_topology	40	Csat__atpH Cgra__NC_028517.1_YP_009182878.1_9 Crub__NC_027693.1_YP_009161908.1_9 Bstri_NP_051046 Alyr__LN877383.1_CUA65391.1_9	Csat__atpH Atha__NC_000932.1_NP_051040.1_3
TRUE	AC_topology	100	Alyr__LN877383.1_CUA65392.1_10	Atha__NC_000932.1_NP_051040.1_3
FALSE	Other_topology	BS_scoreNA	Alyr__LN877383.1_CUA65393.1_11 Bstri_NP_051048	Alyr__LN877383.1_CUA65393.1_11 Bstri_NP_051048
FALSE	Other_topology	BS_scoreNA	Alyr__LN877383.1_CUA65395.1_13	Alyr__LN877383.1_CUA65395.1_13 Atha__NC_000932.1_NP_051040.1_3
TRUE	AC_topology	100	Alyr__LN877383.1_CUA65396.1_14	Csat__psbM Atha__NC_000932.1_NP_051040.1_3
FALSE	Other_topology	BS_scoreNA	Cgra__NC_028517.1_YP_009182884.1_15	Bstri_NP_051048
FALSE	Other_topology	BS_scoreNA	Csat__psbM	Bstri_NP_051048
TRUE	AC_topology	50	Alyr__LN877383.1_CUA65399.1_17	Csat__psbM Atha__NC_000932.1_NP_051040.1_3
TRUE	AC_topology	96	Alyr__LN877383.1_CUA65400.1_18	Csat__psbM Atha__NC_000932.1_NP_051040.1_3
FALSE	Other_topology	BS_scoreNA	Crub__NC_027693.1_YP_009161918.1_19 Cgra__NC_028517.1_YP_009182888.1_19	Atha__NC_000932.1_NP_051040.1_3
FALSE	Other_topology	BS_scoreNA	Alyr__LN877383.1_CUA65402.1_20 Csat__rps14	Alyr__LN877383.1_CUA65402.1_20 Csat__rps14
TRUE	AB_topology	60	Alyr__LN877383.1_CUA65405.1_23	Csat__rps14 Atha__NC_000932.1_NP_051040.1_3
FALSE	Other_topology	BS_scoreNA	Alyr__LN877383.1_CUA65406.1_24	Bstri_NP_051048
FALSE	Other_topology	BS_scoreNA	Alyr__LN877383.1_CUA65407.1_25	Csat__ndhJ Atha__NC_000932.1_NP_051040.1_3
TRUE	AC_topology	100	Alyr__LN877383.1_CUA65408.1_26	Csat__ndhJ Atha__NC_000932.1_NP_051040.1_3
FALSE	Other_topology	BS_scoreNA	Alyr__LN877383.1_CUA65409.1_27	Csat__ndhC Bstri_NP_051064 Atha__NC_000932.1_NP_051040.1_3
FALSE	Other_topology	BS_scoreNA	Alyr__LN877383.1_CUA65410.1_28	Csat__atpE Atha__NC_000932.1_NP_051040.1_3
TRUE	AC_topology	72	Alyr__LN877383.1_CUA65411.1_29	Csat__atpE Atha__NC_000932.1_NP_051040.1_3
FALSE	Other_topology	BS_scoreNA	Csat__rbcl	Atha__NC_000932.1_NP_051067.1_30
FALSE	Other_topology	BS_scoreNA	Cgra__NC_028517.1_YP_009182901.1_32	Esal__NC_028517.1_YP_009161907.1_8
FALSE	Other_topology	BS_scoreNA	Csat__ycf4	Alyr__LN877383.1_CUA65411.1_29
FALSE	Other_topology	BS_scoreNA	Csat__cemA	Csat__cemA Atha__NC_000932.1_NP_051040.1_3
TRUE	AC_topology	77	Alyr__LN877383.1_CUA65417.1_35	Csat__cemA Atha__NC_000932.1_NP_051040.1_3
FALSE	Other_topology	BS_scoreNA	Csat__psbJ	Bstri_NP_051073 Alyr__LN877383.1_CUA65419.1_37
FALSE	Other_topology	BS_scoreNA	Cgra__NC_028517.1_YP_009182906.1_37 Alyr__LN877383.1_CUA65419.1_37 Crub__NC_027693.1_YP_009161936.1_37	Atha__NC_000932.1_NP_051040.1_3
FALSE	Other_topology	BS_scoreNA	Bstri_NP_051075 Cgra__NC_028517.1_YP_009182907.1_38 Csat__psbF	Esal__NC_028517.1_YP_009161907.1_8
FALSE	Other_topology	BS_scoreNA	Alyr__LN877383.1_CUA65421.1_39 Crub__NC_027693.1_YP_009161938.1_39 Cgra__NC_028517.1_YP_009182908.1_39 Csat__psbE	Csat__psbF Atha__NC_000932.1_NP_051040.1_3
FALSE	Other_topology	BS_scoreNA	Csat__petL	Csat__petL Atha__NC_000932.1_NP_051077.1_31
FALSE	AB_topology	0	Alyr__LN877383.1_CUA65423.1_41	Bstri_NP_051078 Atha__NC_000932.1_NP_051079.1_42
FALSE	Other_topology	BS_scoreNA	Alyr__LN877383.1_CUA65424.1_42	Atha__NC_000932.1_NP_051079.1_42
FALSE	Other_topology	BS_scoreNA	Alyr__LN877383.1_CUA65425.1_43	Bstri_NP_051078
FALSE	Other_topology	BS_scoreNA	Alyr__LN877383.1_CUA65426.1_44	Bstri_NP_051078
TRUE	BC_topology	0	Alyr__LN877383.1_CUA65427.1_45	Csat__petL Atha__NC_000932.1_NP_051077.1_31
TRUE	Other_topology	BS_scoreNA	Cgra__NC_028517.1_YP_009182916.1_47 Crub__NC_027693.1_YP_009161946.1_47 Csat__clpP Alyr__LN877383.1_CUA65430.1_47	Csat__petL Atha__NC_000932.1_NP_051077.1_31
TRUE	AC_topology	74	Alyr__LN877383.1_CUA65431.1_48	Bstri_NP_051078 Atha__NC_000932.1_NP_051079.1_42
FALSE	Other_topology	BS_scoreNA	Alyr__LN877383.1_CUA65432.1_49	Atha__NC_000932.1_NP_051079.1_42
FALSE	Other_topology	BS_scoreNA	Csat__psbN	Bstri_NP_051085 Csat__psbT Atha__NC_000932.1_NP_051040.1_3
TRUE	Other_topology	BS_scoreNA	Csat__psbH Crub__NC_027693.1_YP_009161950.1_51 Cgra__NC_028517.1_YP_009182920.1_51 Alyr__LN877383.1_CUA65434.1_51 Bstri_NP_051087	Bstri_NP_051085
FALSE	Other_topology	BS_scoreNA	Cgra__NC_028517.1_YP_009182921.1_52 Crub__NC_027693.1_YP_009161951.1_52	Atha__NC_000932.1_NP_051040.1_3
FALSE	Other_topology	BS_scoreNA	Alyr__LN877383.1_CUA65436.1_53	Alyr__LN877383.1_CUA65436.1_53
FALSE	Other_topology	BS_scoreNA	Alyr__LN877383.1_CUA65437.1_54	Csat__rpoA Atha__NC_000932.1_NP_051040.1_3
TRUE	Other_topology	BS_scoreNA	Crub__NC_027693.1_YP_009161954.1_55 Cgra__NC_028517.1_YP_009182924.1_55 Csat__rps11	Csat__rpoA Atha__NC_000932.1_NP_051040.1_3
FALSE	Other_topology	BS_scoreNA	Csat__rpl36 Alyr__LN877383.1_CUA65439.1_56	Atha__NC_000932.1_NP_051092.1_56
FALSE	Other_topology	BS_scoreNA	Alyr__LN877383.1_CUA65440.1_57 Csat__rps8 Cgra__NC_028517.1_YP_009182926.1_57 Crub__NC_027693.1_YP_009161956.1_57 Bstri_NP_051093	Alyr__LN877383.1_CUA65439.1_56
FALSE	Other_topology	BS_scoreNA	Csat__rpl14 Crub__NC_027693.1_YP_009161957.1_58 Cgra__NC_028517.1_YP_009182927.1_58 Bstri_NP_051094	Bstri_NP_051093
TRUE	Other_topology	BS_scoreNA	Bstri_NP_051095	Csat__rpl14 Atha__NC_000932.1_NP_051094.1_59
TRUE	Other_topology	BS_scoreNA	Crub__NC_027693.1_YP_009161959.1_60 Cgra__NC_028517.1_YP_009182929.1_60 Csat__rps3	Csat__rpl14 Atha__NC_000932.1_NP_051094.1_59
FALSE	Other_topology	BS_scoreNA	Crub__NC_027693.1_YP_009161960.1_61 Cgra__NC_028517.1_YP_009182930.1_61	Atha__NC_000932.1_NP_051094.1_59
FALSE	Other_topology	BS_scoreNA	Alyr__LN877383.1_CUA65445.1_62	Atha__NC_000932.1_NP_051094.1_59
TRUE	AC_topology	100	Alyr__LN877383.1_CUA65452.1_69	Csat__rpl14 Atha__NC_000932.1_NP_051094.1_59
FALSE	Other_topology	BS_scoreNA	Crub__NC_027693.1_YP_009161968.1_69 Cgra__NC_028517.1_YP_009182939.1_70	Atha__NC_000932.1_NP_051094.1_59
TRUE	AC_topology	88	Alyr__LN877383.1_CUA65454.1_71	Csat__rpl14 Atha__NC_000932.1_NP_051094.1_59
TRUE	AC_topology	93	Alyr__LN877383.1_CUA65455.1_72	Csat__rpl14 Atha__NC_000932.1_NP_051094.1_59
FALSE	Other_topology	BS_scoreNA	Alyr__LN877383.1_CUA65456.1_73	Atha__NC_000932.1_NP_051115.1_74
FALSE	Other_topology	BS_scoreNA	Alyr__LN877383.1_CUA65457.1_74	Bstri_NP_051095
TRUE	Other_topology	BS_scoreNA	Crub__NC_027693.1_YP_009161973.1_74 Cgra__NC_028517.1_YP_009182944.1_75 Csat__ndhG	Csat__ndhG Atha__NC_000932.1_NP_051115.1_74
TRUE	AC_topology	82	Alyr__LN877383.1_CUA65459.1_76	Csat__ndhG Atha__NC_000932.1_NP_051115.1_74
TRUE	Other_topology	BS_scoreNA	Cgra__NC_028517.1_YP_009182946.1_77 Crub__NC_027693.1_YP_009161975.1_76 Csat__ndhA	Csat__ndhA Atha__NC_000932.1_NP_051115.1_74
FALSE	Other_topology	BS_scoreNA	Bstri_NP_051115	Csat__ndhH Bstri_NP_051115 Atha__NC_000932.1_NP_051116.1_79
FALSE	Other_topology	BS_scoreNA	Alyr__LN877383.1_CUA65462.1_79	Atha__NC_000932.1_NP_051116.1_79