

Agroup_monophyly	Crub_Cgrand_monophyly	C_group_monophyly	Topology	Bootstrap_Support	Athal_sister
FALSE	TRUE	FALSE	Other_topology	BS_scoreNA	Csat_psbA Bstri_NP_051039
TRUE	TRUE	FALSE	Other_topology	BS_scoreNA	Alyr__LN877383.1_CUA65385.1_3
FALSE	TRUE	TRUE	AC_topology	20	Crub__NC_027693.1_YP_009161904.1_5 Cgra__NC_028517.1_YP_009182874.1_5 Csat_psbK
FALSE	FALSE	FALSE	Other_topology	BS_scoreNA	Bstri_NP_051043 Csat_psbI Alyr__LN877383.1_CUA65388.1_6
TRUE	TRUE	TRUE	AC_topology	68	Alyr__LN877383.1_CUA65389.1_7
FALSE	TRUE	FALSE	AC_topology	100	Crub__NC_027693.1_YP_009161907.1_8 Cgra__NC_028517.1_YP_009182877.1_8
FALSE	TRUE	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
TRUE	TRUE	TRUE	AC_topology	100	Alyr__LN877383.1_CUA65392.1_10
FALSE	TRUE	FALSE	AB_topology	53	Alyr__LN877383.1_CUA65393.1_11 Bstri_NP_051048
TRUE	TRUE	FALSE	AC_topology	100	Alyr__LN877383.1_CUA65395.1_13
TRUE	TRUE	TRUE	AC_topology	100	Alyr__LN877383.1_CUA65396.1_14
FALSE	FALSE	FALSE	AC_topology	10	Cgra__NC_028517.1_YP_009182884.1_15
FALSE	TRUE	FALSE	Other_topology	BS_scoreNA	Csat_psbM
TRUE	TRUE	TRUE	AC_topology	50	Alyr__LN877383.1_CUA65399.1_17
TRUE	TRUE	TRUE	AC_topology	96	Alyr__LN877383.1_CUA65400.1_18
FALSE	TRUE	FALSE	Other_topology	BS_scoreNA	Crub__NC_027693.1_YP_009161918.1_19 Cgra__NC_028517.1_YP_009182888.1_19
FALSE	TRUE	FALSE	AC_topology	100	Alyr__LN877383.1_CUA65402.1_20 Csat_rps14
TRUE	TRUE	TRUE	AB_topology	60	Alyr__LN877383.1_CUA65405.1_23
TRUE	TRUE	FALSE	Other_topology	BS_scoreNA	Alyr__LN877383.1_CUA65406.1_24
TRUE	TRUE	FALSE	AC_topology	53	Alyr__LN877383.1_CUA65407.1_25
TRUE	TRUE	TRUE	AC_topology	100	Alyr__LN877383.1_CUA65408.1_26
TRUE	TRUE	FALSE	Other_topology	BS_scoreNA	Alyr__LN877383.1_CUA65409.1_27
TRUE	TRUE	FALSE	AC_topology	100	Alyr__LN877383.1_CUA65410.1_28
TRUE	TRUE	TRUE	AC_topology	72	Alyr__LN877383.1_CUA65411.1_29
FALSE	TRUE	FALSE	AC_topology	100	Csat_rbcL
FALSE	FALSE	FALSE	Other_topology	BS_scoreNA	Cgra__NC_028517.1_YP_009182901.1_32
FALSE	TRUE	FALSE	AC_topology	100	Csat_ycf4
FALSE	TRUE	FALSE	AC_topology	100	Csat_cemA
TRUE	TRUE	TRUE	AC_topology	77	Alyr__LN877383.1_CUA65417.1_35
FALSE	TRUE	FALSE	Other_topology	BS_scoreNA	Csat_psbJ
FALSE	FALSE	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
FALSE	FALSE	FALSE	Other_topology	BS_scoreNA	Bstri_NP_051075 Cgra__NC_028517.1_YP_009182907.1_38 Csat_psbF
FALSE	FALSE	FALSE	AC_topology	0	Alyr__LN877383.1_CUA65421.1_39 Crub__NC_027693.1_YP_009161938.1_39 Cgra__NC_028517.1_YP_009182908.1_39 Csat_psbE
FALSE	TRUE	FALSE	Other_topology	BS_scoreNA	Csat_petL
TRUE	TRUE	FALSE	AB_topology	0	Alyr__LN877383.1_CUA65423.1_41
TRUE	TRUE	FALSE	AC_topology	8	Alyr__LN877383.1_CUA65424.1_42
TRUE	TRUE	FALSE	BC_topology	30	Alyr__LN877383.1_CUA65425.1_43
TRUE	TRUE	FALSE	Other_topology	BS_scoreNA	Alyr__LN877383.1_CUA65426.1_44
TRUE	TRUE	TRUE	BC_topology	0	Alyr__LN877383.1_CUA65427.1_45
FALSE	TRUE	TRUE	AC_topology	61	Cgra__NC_028517.1_YP_009182916.1_47 Crub__NC_027693.1_YP_009161946.1_47 Csat_clipP Alyr__LN877383.1_CUA65430.1_47
TRUE	TRUE	TRUE	AC_topology	74	Alyr__LN877383.1_CUA65431.1_48
TRUE	TRUE	FALSE	Other_topology	BS_scoreNA	Alyr__LN877383.1_CUA65432.1_49
FALSE	FALSE	FALSE	Other_topology	BS_scoreNA	Csat_psbN
FALSE	TRUE	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_051094
FALSE	TRUE	FALSE	AC_topology	100	Cgra__NC_028517.1_YP_009182921.1_52 Crub__NC_027693.1_YP_009161951.1_52
TRUE	TRUE	FALSE	AC_topology	58	Alyr__LN877383.1_CUA65436.1_53
TRUE	TRUE	FALSE	AC_topology	72	Alyr__LN877383.1_CUA65437.1_54
FALSE	TRUE	TRUE	Other_topology	BS_scoreNA	Crub__NC_027693.1_YP_009161954.1_55 Cgra__NC_028517.1_YP_009182924.1_55 Csat_rps11
FALSE	TRUE	FALSE	AC_topology	100	Csat_rpl36 Alyr__LN877383.1_CUA65439.1_56
FALSE	TRUE	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_051095
FALSE	TRUE	FALSE	BC_topology	4	Csat_rpl14 Crub__NC_027693.1_YP_009161957.1_58 Cgra__NC_028517.1_YP_009182927.1_58 Bstri_NP_051094
FALSE	TRUE	TRUE	Other_topology	BS_scoreNA	Bstri_NP_051095
FALSE	TRUE	TRUE	AC_topology	68	Crub__NC_027693.1_YP_009161959.1_60 Cgra__NC_028517.1_YP_009182929.1_60 Csat_rps3
FALSE	TRUE	FALSE	Other_topology	BS_scoreNA	Crub__NC_027693.1_YP_009161960.1_61 Cgra__NC_028517.1_YP_009182930.1_61
TRUE	TRUE	FALSE	AC_topology	97	Alyr__LN877383.1_CUA65445.1_62
TRUE	TRUE	TRUE	AC_topology	100	Alyr__LN877383.1_CUA65452.1_69
FALSE	TRUE	FALSE	AC_topology	62	Crub__NC_027693.1_YP_009161968.1_69 Cgra__NC_028517.1_YP_009182939.1_70
TRUE	TRUE	TRUE	AC_topology	88	Alyr__LN877383.1_CUA65454.1_71
TRUE	TRUE	TRUE	AC_topology	93	Alyr__LN877383.1_CUA65455.1_72
TRUE	TRUE	FALSE	Other_topology	BS_scoreNA	Alyr__LN877383.1_CUA65456.1_73
TRUE	TRUE	FALSE	BC_topology	10	Alyr__LN877383.1_CUA65457.1_74
FALSE	TRUE	TRUE	AC_topology	97	Crub__NC_027693.1_YP_009161973.1_74 Cgra__NC_028517.1_YP_009182944.1_75 Csat_ndhG
TRUE	TRUE	TRUE	AC_topology	82	Alyr__LN877383.1_CUA65459.1_76
FALSE	TRUE	TRUE	Other_topology	BS_scoreNA	Cgra__NC_028517.1_YP_009182946.1_77 Crub__NC_027693.1_YP_009161975.1_76 Csat_ndhA
FALSE	TRUE	FALSE	AB_topology	49	Bstri_NP_051115
TRUE	TRUE	FALSE	AC_topology	99	Alyr__LN877383.1_CUA65462.1_79