

#NEXUS

BEGIN trees;

TREE '[1]Tree1' = (((((Bpra007086:0.64980435,Smin040183:0.74409986)99:0.575092,
(((Ehux023753:0.85864234,Misp025558:0.13229318)95:0.238634,Mpus006304:0.53835356)100:0.
.28708,(Oluc003749:0.1359878,Otau004243:0.29321036)100:0.640315)95:0.145035)100:0.41888,
(((Ata1638166:0.74238336,Ehux027657:0.5721266)67:0.244813,
(((Fcyl000004:0.021400366,Fcyl009520:0.021111945)100:0.284917,
(((Pmul009211:0.22318427,Tpse002903:0.28273574)91:0.128879,Fcyl006173:0.33263606)52:0.04
4362,Ptri004380:0.31325275)93:0.113408)100:0.354865,Fcyl020191:0.4805717)91:0.187426)98:0.
.571168,PLD_STRAT:1.0653334)92:0.229571,(Q9KZ51_STRCO:0.42797297,
(Q8P3A0_XANCP:0.46882012,Q1IUFO_KORVE:0.6025003)78:0.038539)100:0.836643)97:0.328
747)87:0.092505,((((((((PSS_ECOLI:2.4932E-
6,Q32CT4_SHIDS:0.0051035015)100:0.008025,Q7CQ03_SALTY:0.044583905)100:0.137945,
(Q8D180_YERPE:2.4932E-6,Q0WC15_YERPE:2.4932E-
6)100:0.096728)98:0.137409,PSS_HAEIN:0.4009569)96:0.078998,Q8EEJ1_SHEON:0.5243319)9
4:0.087272,Q9KV43_VIBCH:0.13590045)93:0.046296,Q5E223_VIBF1:0.15074526)100:1.42889
1,
(((Aano005865:1.025872,Cpar00002717:1.595823)96:0.122003,Bnat009513:1.5248495)98:0.2409
14,
(((Fcyl022283:0.0808882,Fcyl022958:0.050527103)100:0.734833,Pmul014137:0.41382897)100:0.
211953,(Tpse010655:0.46054617,Ptri009159:1.0413864)100:0.246045)99:0.151772)79:0.140639,
(((Alai013376:0.534553,
(Pinf011946:0.58305675,Pirr011769:0.46645758)100:0.127393)100:0.187417,
(((Anig006882:0.49156192,
(Tlon003902:0.24274643,Scer005474:0.8751661)100:0.205921)100:0.331563,
(((Bflo026111:0.61293674,Nvec018540:0.46738648)100:0.226726,(((Btau034625:2.4932E-
6,Btau034632:0.03334898)100:0.063774,((Hsap055096:2.4932E-6,Hsap055098:2.4932E-
6)23:2.0E-6,Hsap055097:2.4932E-6)34:3.0E-
6)100:0.267493,Xtro005656:0.14479971)100:0.152265,(Lmaj007567:0.3032168,
(((Tbru002718:0.26047575,Tcon004696:0.49875817)99:0.147965,Tviv009743:0.25398773)98:0.14
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(((Ehux015698:0.011173634,Ehux024947:0.41050187)100:0.703593,Ptet016792:1.3260138)71:0.
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(Tann002595:0.18564153,Tpar000967:0.018829843)100:1.431441)100:0.12958,Bbov002136:0.90
60552)97:0.224838)62:0.039973)97:0.275249)100:0.55396,(((Anig005852:0.3375998,
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2)100:0.572785,(Ntet001467:0.50223184,Tlon009715:0.52366984)100:0.786745)100:0.613872,
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(Alim003592:0.12501301,Sagg004318:0.18162315)100:0.20352)100:0.283618,D1B824_THEAS:0.
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(CLS2_BACCR:0.009628508,CLS2_BACAN:0.010063035)100:0.104313)98:0.074851,CLS1_BA
CSU:0.35136926)74:0.042894,
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(CLS1_STAEQ:0.11822116,(CLS1_STAAR:2.4932E-
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(Q6MU83_MYCMS:0.2017928,Q6F0J0_MESFL:0.2994004)100:0.500685)84:0.081593)51:0.073
128)48:0.084375)28:0.050296)32:0.078536,
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6)100:0.07707)100:0.119262,Q63SZ7_BURPS:0.18336889)100:0.115642,Q7NE04_GLOVI:0.360
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((Zmay051637:2.4932E-6,Zmay051639:2.4932E-6)38:2.0E-6,Zmay051644:2.4932E-6)94:0.00908)100:0.078096)100:0.082012)87:0.06831,Smoe006872:0.12356121)87:0.071344,Csu b008810:0.24362297)51:0.04676,((((Atha007890:0.031257715, (Atha024406:0.025479125,Atha024407:2.4932E-6)100:0.120202)98:0.019395, (((((Gmax002958:0.005629179,Gmax042152:0.00883781)100:0.020455, (Gmax014677:0.027722917,Gmax004976:0.13365515)100:0.04807)100:0.017312, (Gmax001858:0.036165383,Gmax001859:0.39586997)100:0.101197)88:0.015864,Vvin018316:0.0 25920123)86:0.013047,Vvin012796:0.086992994)83:0.005145)86:0.01893, ((Slyc003762:0.061516833,Slyc024580:0.03271441)100:0.028006,(Slyc027974:0.058960102, ((Osat001202:0.029155266,Zmay049601:0.046419863)100:0.039703,(Osat025379:0.048096504, (Zmay049513:2.8913E-6,Zmay049514:2.4932E- 6)100:0.12528)100:0.037542)100:0.045471)99:0.022221)98:0.012361)100:0.092585, (((((((((Atha014886:0.06009527, (Slyc011616:0.04936131,Slyc012331:0.028659293)100:0.024624)84:0.010534,Vvin002767:0.0512 86176)90:0.010401, (Gmax001376:0.0037490046,Gmax024948:0.014366488)100:0.037085)99:0.02964, (Vvin004662:0.03284302, (Gmax007210:0.011334828,Gmax011451:0.009631177)100:0.045716)100:0.013313)98:0.014607, Slyc000437:0.03174643)100:0.043845,(Osat033891:0.020663071,(Zmay012815:2.4982E- 6,Zmay022291:0.020508695)100:0.01539)100:0.040345)100:0.036404, ((Gmax010557:0.0035219116,Gmax017411:0.05043105)100:0.063722,Vvin015231:0.08470345)9 3:0.027933)72:0.007639, ((Slyc005230:0.05285805,Slyc025561:0.08621191)100:0.052118,Zmay057456:0.23804608)82:0.0 28357)74:0.021738,((Osat013545:0.041997988,Zmay028750:0.024747666)100:0.085069, (Osat022470:2.263E-6,Osat022471:0.0067696813)100:0.081858)100:0.065324)98:0.04184, ((Smoe022201:0.050183464,Smoe004984:0.18911922)100:0.042318,(Ppat017135:0.10469891, ((Ppat001541:0.033654857,Ppat027062:0.09659295)100:0.047231,Ppat025370:0.086416304)100:0 .062161)100:0.070946)99:0.044681)91:0.041962)100:0.086236)43:0.029528, (((Atha015222:0.1460232, ((Gmax014071:0.053042077,Gmax018004:0.007399555)100:0.050389,Gmax033705:0.04706541) 100:0.047508)91:0.020009,Vvin010591:0.03982776)99:0.160788, (Osat033997:0.055632383,Zmay026568:0.052955374)100:0.217517)100:0.099557)99:0.072205)6 1:0.027647)71:0.029254, (Ptri009744:0.16054693, Tpse010415:0.24730518)100:0.148922)68:0.048841, (Ppur001844:0.29304844,Chc0000001:0.46442893)72:0.061629)100:0.228615, (((((Dpur002429:0.20961961,Cypa007070:0.9770149)48:0.107859,Dpur006360:0.29796392)39:0.0 84471,(Ngru000802:0.14240295,Ngru000879:0.17742956)100:0.300511)88:0.056138, (((Alim000046:0.14253487,Sagg004103:0.24243182)98:0.273726,Smin014079:0.4986084)87:0.09 5993,(Aano000842:0.8979158, (((((Alai004921:0.10730573,Alai008541:0.11780571)100:0.072002,Pirr010579:0.060020354)74:0. 052257,Pinf002801:0.038856186)99:0.217669,((((((Bflo016194:2.4932E-6,Bflo038836:2.4932E- 6)100:0.199885,Dpul014688:0.18269339)99:0.0585, (((((((((Btau001035:0.0,Btau001041:0.0):0.0,Btau001038:0.0):2.0E-6,Btau001036:2.4932E- 6)45:2.0E-6,Btau001040:2.4932E-6)100:0.016931,(Hsap015243:2.4932E-6,Hsap015245:2.4932E- 6)100:0.01218)100:0.03163,Xtro004261:0.02108274)100:0.025169, (Drer002937:0.028683186,Drer040222:0.068440005)80:0.016759)99:0.058986, ((Drer009284:2.8913E-6,Drer009287:0.103493184)100:0.082677,((Btau033043:0.009496685, ((Hsap051782:2.4932E-6,Hsap051784:2.4932E-6)48:2.0E- 6,Hsap051788:0.015908863)99:0.037648)100:0.153897,Xtro025185:0.12887481)100:0.088608)99: 0.07909)88:0.06942,(Drer017198:2.1273E- 6,Drer017199:0.053853516)100:0.128318)88:0.031566)95:0.064202,Nvec014567:0.19722588)100 :0.129511,

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(Ehux028152:0.2556113,((Ehux013697:2.4932E-6,Ehux015190:2.4932E-6)100:0.004005,Ehux013699:0.06922512)100:0.550969)100:0.24104)58:0.083554)49:0.045468)73:0.236216,
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(Q55769_SYNY3:0.3375321,Q8DGH8_THEEB:0.24166071)100:0.290388)100:1.257972)97:0.381078,

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END;

Appendix S3. Maximum likelihood tree of PLD homologs reconstructed from the multiple sequence alignment shown in Appendix S1. The tree was reconstructed using PhyML with all settings at default values, using the LG model of aminoacid substitution and 600 bootstrap replicates. Bootstrap support values are shown as percentages (from 0 to 100). The tree is visualized in Nexus format. For eukaryotic sequences, the sequence labels are the internal codes described in Table S1. For prokaryotic sequences, the labels correspond to UniProt IDs. For more details, see Methods.