

Figure S4. Deduced amino acids sequences from PAL transcripts of *Pinus taeda*

>Pteda1143311

MVAAAIEITQANEVQVKSTGLCTDFGSSGSDPLNWWRAAKAMEGSHFEEVKAMVDSYFGAK
EISIEGKSLTISDVAAVARRSQVKVKLDAAAASRVEESSNWVLTQMTKGTDTYGVTTGF
GATSHRRTNQGAELQKELIRFLNAGVLGKCPENVLSEDTTRAAMLVRTNTLLQGYSGVRW
DILETVEKLLNAWLTPKPLRGTITASGDLVPLSYIAGLLTGRPNRSRVRSDGIEMSGAE
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PEFTDPLTHLKHHPGQMEAAAIMEYVLDGSSYMKHAAKHEMNPLQKPKQDRYGLRTSP
QWLGPQVEIIRSATHMIEREINSVNDNPVIDVARDKALHGGNFQGTPIGVSMNLRLSIS
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SHVQSAEQHNQDVNSLGLVSARKSAEAIDILKMLSTYLTALCQAVDLRHLEENMLATVK
QIVSQVAKKTLSTGLNGELLPGRFCEKDLLQVVDNEHVFSYIDDPNASYPLTQKLRNIL
VEHAFKNAEGEKDPNTSIFNKIPVFEAELKAQLEPQVSLARESVDKGTSPDPRIQECRS
YPLYEFVRNLGTKLLSGTRTISPGEVIEVVYDAISEDKVIVPLFKCLDGWKGTLAHSEI
NNLPRSPLYNDCYDLSRMLLLMLLFSDFEFDWS

>Pteda17307

MVAGADLGAVQANGNQNGFHHVHVSVDLCTQNGPDPLNWGQAAKALQGSHFEEVKLMVE
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GVTTGFGATSHRRTNQGAELQKELIRFLNSGVLTGDNVLPQETTRAAMLVRTNTLMQYS
GIRWEILETIQKLLNAGITPKLPLKGTITASGDLVPLSYIAGFITGRPNKARCRDGKEL
GALEALQQIGVEKPFELQPEGLAIVNGTSVGAALASIVCFDANIICIAAEVLSAMFCEV
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RTSPQWLGQIEVIRSATHMIQREINSVNDNPVIDVARDKALHGGNFQGTPIGVSMNLR
LALAAIGKLMFAQFSELVNDYNGGLPSNLSGGPNPSLDYGFKGAEIAMASYTSELQYLA
SPVTHVQSAEQHNQDVNSLGLISARKSAEAIDILNLMVSTYLLALCQAADLRHLEENML
STVKSVVSHVAKKMLSTHNGELLTAGRFCEKDLLQAVENLHVFAVYVDDPCNENYPLMQQL
RQVLVAHALTETAQIQTQTQSSIFNKIPAFEKELKDQMEAEIGRARQDYERGVAGSIPN
RIQECRSFPLYDFARSQLTQLLSGDRVTSPEYIEKVYTGIREGKIISPLFKCLDGWGS
TPGPFHS

>Pteda28316

MAPQEFTGEVKFCAGNGGTASLNDPLNWAAAAESMKGSHFEEVKRMWEEFRSPVVRQGS
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TRQGEALQKELIRFLNAGIFGGCGDSNSLPRDTTRAAMLVRANTLLQGYSGIRWGLEAM
SGLLNAGITPRLRGTITASGDLVPLSYIAGLLTGRSNARAVTADGKELGAAEALAAAG
VENGPPELRPKEGLALVNGTAVGSALAAATVLFANVVLLSEVLSALFCEVMQGNPEFTD
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PQVEVIRASTHMVQREINSVNDNPLIDAARNKALHGGNFQGTVPVGVAMDNARLALAAVVK
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QACKKTLVVGPGGELLPSRFCEKDLLKIDREPVSFYIDNPCSATSVLTTKLRQVLFHA
IEKTANNASILTRIPAFEEELKARIVAEVQETRGAFEKGAALVPNRIKDCRSYPLYEFV

RVELGASLLVGTNSRSPGEDFDKVFVAINEGKAVEPLFKCLERWNGAPIPI

>Pteda34319

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AGIFGGCGDSNTLPRDATRATMLVRTNTLLQGYSGIRWGILEAMTGLLNAGITPRLPLRG
SITASGDLVPLSYIAGLLIGRP NARAVMADGTEVGAAEALAAAGVGNPFFVLRPKEGVAL
VNATAVGSALAAATVLF DANVVVLLSEVLSALFCEVMQGDPGFTNHLIHRKLDHPGQIEAA
AIMEHLLDGS SYMKA AAAKNKEADPLSKPKKDRYALYTSPQWLGPQVEVIRASTHMVQRE
INSVNDNPIIDAAGNKALNGGNFQGT P VGVAMD NVRLALAAV GKLIF AQMSELV NDFY NK
GLPSNL SGGP D PSLDYGFKGAEVAMASYTSELQFLANPV TTHVQSAEQHNQDVNSLGLIS
ARMTAQAVEILKMTSTYLVALCQAIDLRHLEENLHA AVRQAVGEACKKTLVVGPRGELL
LLKAVDREPVFSYIDNPCSATS VLT T VLRQVLF EHALEKTTDNDG SILTRVPAFEEELKA
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>Pteda9006

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SAKERVERSYQWVAKNVARGTD TYGVTTGFGATSHRRTDKAADLQKELIRFLNAGVVGKE
RLCLPAEYTKAAMLVRTNTLMQGYSGIRWEILDALRKLMDCNITPKLPLRGTITASGDLV
PLSYIAGLLTARPNSKALSPDGHLLDAMEALRKAGILEPFKLPKEGLALVNGTAVGSAV
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DYVKEAARLHEKDPLSKPKQDRYALRTSPQWLGPPIEVIRAATHS IEREINSVNDNPLID
VSRDMALHGGNFQGTPIGVSMNMRISLAAV GKL LFAQFSELVCDYNNGLPSNL SGGPN
PSLDYGFKGAEIAMAAYTSELQYLANPV TTHVQSAEQHNQDVNSLGLISARKTAEAVEIL
KLMFATYLVALCQAIDLRHLEENMRSVVKHVVLQAARKTLCTAEDGSLHDTGFCEKELLQ
VIDHQPVFSYIDDP TNP SYALMLQLREVLVDEALKSSCPDGN AESDHNLQPAESAGAAGI
LPNWVFSRIPIFQEELKARLEEEVPKARERFDNGDFPIANRINKCRTYPIYRFVRSSELGT
DLLTGPKWRSPGEDIEKVFEGICQ GKIGDVIKCLDAWX