

Table S1: Sequences used in the phylogenetic reconstruction of PABP in the Excavates.

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>Tthe1
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>Tthe2
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>Tcar2
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>Tbor1
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>Tbor2

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>Tgra1

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>Tgra2

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>Tgra3

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>Pdav1

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>Pdav3

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>Pdav2

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>Pser1

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>Pser2

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>Pser3

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>Egra_a

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>Egra_b

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>Egra_c

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>Tbru1

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>Tbru2

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>Lmaj2

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>Lmaj3

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>Lmaj1

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ILSCKV MQDEEGKS RGYG FVHF KDETSAKDA I VKMNGA ADHASED KK ALYVANF I RR NARLA ALVANFT
N VYIKQVLPTV NKDVIEKFFAKFGGITS SAAACKDKSGRVFAFCNFEKHDDAVKAVEAMHDHIDGITAP
GEKLYVORA QPRSERLIALRQKYM QHOALGNNLYVRNFDPEFTGADLLELFKEYGEVKSC RV MVSE SGV
SRGFGF VSFSNADEANAALREMNGRMLNGKPLIVNIAQR RDQRYTIVRLQFQ QRLQMMMRQMH QPMPFV
GSQGRPMRGRGGRQQLGGR A QGH PMPMPS PQQPQGFA TPSAVGFVQATPKHSPGDV PETPPLP
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>Lbra3

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>Lbra2

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GTKLGS RYLRIAKIQR DPSKRRSGVNNILVKKL PKTVDTYALKELFSKFG RLTAIGLACDEK GESRGY
RISFEREE SAVEAVKEMDG MEMDGQ AIVVER YQAH RDELLKQFTNLYVKNLDPAV TDEKLRAFFARYG
AVSSAKV RDLGGVQSEV GLGYV AF EKHEDAAR AVEELNGKE C IAKAESTL DVSRFRS REER QRD RER Q
RRERAQOH SKYPN LYVKGF DDTVT SERLEELF QRYGETV SVT VMMD KETGMSRC FG VSMKDQ NAASQA
IQELNGSTFLCP RL FVTY ALRK DARR QNLEERSK QF RVR QNPM GGPGM GMG P VGF MG P QMF NSV NMP
FMS PRV P IMPM NGMNGIGGMNGM GMGNGM GMGNGM GMG MGT MGGM GM GRP MAPNAMS QMRS RP MPQ
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>Lbra1

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ILSCKV MEDEEGKS RGYG FVHF KDE ISAKDA I VKMNGA ADHASED KK ALYVANF I RR NARLA ALVANFT
N VYIKQVLPTV NKEV IENFFAKFGGITS SAAACKDKSGRVFAFCNFEKHDDAVKAVEAMHDHIDGITAP
GEKLYVORA QPRSERLIALRQKYM QHO SLGNNLYVRNFDPEFTGADLLELFKEYGDVKSC RV MMSE SG
SRGFGF VSFSNADEANAALREMNGRMLNGKPLIVNIAQR RDQRYTMLRLQFQ QRLQMMMRQMH QPMPFV
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TV

>Lin f3

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PPPPP NMGMQFMSGPMIRRP MAMEPHLMQGEPMRPPNRYTQP REQYPPQQRQDGVD MNYLSTSPEQOK
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HTGN

>Linf2

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>Linf1

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VLKAHOTA

>Tcon1

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>Tcon2

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NHI RA

>Tcru1

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>Tcru2

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>Tva1

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>Tva2

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>Tva3

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SRTLO