```
Drome-CYC         ------MEVQEFCEN-------------------MEEIEDENYDEEKSARTS-DENRKQN
Tal-BMAL1         -------SVASLSSDGVN--------IKKKLPTLGESHNDEDLDCSKNNRSSAEWNKRQN
Pacle-BMAL1A      MFGMSNFDYPKYRSECNSLASFSSDGGSKKRRGSFIDSNDDDADSIKIPRTAGDWNKRQN
Ep-BMAL1          MFGVVGFDYPEYRSDSASGASYPSEGASKKRRGSTAESTEDDKDSSKMPRTSTDWNKRQN
                         .  .  .:                     .  ::: *  *  *:: : *::**

Drome-CYC         HSEIEKRRRDKMNTYINELSSMIPMCFAMQRKLDKLTVLRMAVQHLRGIRGSGSLHPFNG
Tal-BMAL1         HSEIEKRRRDKMNTYISELSRMIPQC--QSRKLDKLSVLRMAVQHIKMLRG--SINSYTE
Pacle-BMAL1A      HSEIEKRRRDKMNTYIMELSSIIPVC--TSRKLDKLTVLRMAVQHMKMLRG--SLNSYTE
Ep-BMAL1          HSEIEKRRRDKMNTYIMELSSIIPVG--TSRKLDKLTVLRMAVQHMKMLRG--SLNSYTE
                  **************** *** :**     .******:********:: :**  *::.:.

Drome-CYC         SDYRPSFLSDQELKMIILQAS-EGFLFVVGCDRGRILYVSDSVSSVLNSTQADLLGQSWF
Tal-BMAL1         GQYKPSFVSDEQVQQLLQQQCTEGFLFVVGCDRGKILFVSESVSHILQYSQCELLGLSWF
Pacle-BMAL1A      GHYKPAFLSDDELKNLILQAA-DGFLFVVGCDRGRILYVSESVYQTLHYTQGELLGTSWF
Ep-BMAL1          GHYKPSFLSDDELKNLILQAA-DGFLFVVGCDRGRIIYVSESVSQTLQYTHSELLGTSWF
                  ..*:*:*:**:::: :: * . :***********:*::**:**   *: :: :*** ***

Drome-CYC         DVLHPKDIGKVKEQLSSLEQCPRERLIDAKTMLPVKT--------------DVPQSLCRL
Tal-BMAL1         DILHPKDLTKVKEQLSCGDISRRERLVDAKTLLPVHHSPNSSSSSSCGNYPSLPQDLTRL
Pacle-BMAL1A      DILHPKDLTKVKEQLSCSDISRRERLVDAKTLLPVKT--------------DVPQGLTKL
Ep-BMAL1          DILHPKDLAKVKEQLSSADINRRDRLVDAKTLLPVKT--------------DVPQGLSKL
                  *:*****: *******. :   *:**:****:***:               .:**.* :*

Drome-CYC         CPGARRSFFCRMKLRTASNNQIKEESDTSSSSRSSTKRKSRLTTGHKYRVIQCTGYLKSW
Tal-BMAL1         CPGSRRAFYARIRRPNVH----KAPADDASD------DASAMTGDKRYMSIHFTGYLKSW
Pacle-BMAL1A      CPGSRRAFFCRMRCKTSP--VLKEEADSSTG--CPRKKSKSQSSDKKYSVIHFTGYLKSW
Ep-BMAL1          CPGFRRSFFCRMRCRSAH--VIKEEADTTTG--CHKKKNKPHCSDKKYSVIHFTGYLKSW
                  *** **:*:.*::  .      *  :* ::.        .    .::*  *: *******

Drome-CYC         TPIKD-EDQDADSDEQTTNLSCLVAIGRIPPNVRNSTVPAS--LDNHPNIRHVLFISRHS
Tal-BMAL1         HGAFRPAGVGDE-DHDSGDAACLVAIGRLHRPLSCASVPLK-------------FVAKLS
Pacle-BMAL1A      APTKDPLEEDSGSDSDSCNLSCLVAVGRVHQPLLASSVLDTSRLGSAAPTQPIEFISKHT
Ep-BMAL1          APTKEPVEEETEVDSDSCNLSCLVAVGRVHQPLLSSVPKDTTRLSRFLPTKPIEFISKHN
                               * :: : :****:**:   :  :    .             *::: .

Drome-CYC         GEGKFLFIDQRATLVIGFLPQEILGTSFYEYFHNEDIAALMESHKMVMQVPEKVTTQVYR
Tal-BMAL1         PEAKYNYVDQRMSVVLGWLPQEVLGASVFELSHPSDHCRLAAAHRALLSKTTVVESLQHR
Pacle-BMAL1A      NDGKFVFIDQRASLLLGWLPQELLGSSMYEYFHQDDIAFLAETHKTTLQNSESCNTQVYR
Ep-BMAL1          SEGKFVFIDQKASLLLGWLPQELLGTSMYEYYHQDDIPILAEAHRLLLQANEPTQTQVYR
                   :.*: ::**: ::::*:****:**:*.:*  * .*   *  :*:  :.      :  :*

Drome-CYC         FRCKDNSYIQLQSEWRAFKNPWTSEIDYIIAKNSVFL-----------------------
Tal-BMAL1         CRHKDGRWVRLEGSWKLFINPWTNELEYIVASNTVFSDDKL----SSTDDSSQRNSLLQY
Pacle-BMAL1A      FRTKEGSFVRLQSNWWTFKNPWTKEIEYIISKNSVVTSEAELVESTMANESVS-QSYSNF
Ep-BMAL1          FRTKDGSFMNFKSMWKTFKNPWTKDVEYIISNNFLILSEGE-VESTMVSDCASSQSFGNI
                   * *:. ::.::. *  * ****.:::**::.* :.

Drome-CYC         ------------------------------------------------------------
Tal-BMAL1         GDSVPPDP----------SLSPSLPSLTPSLGATLQQNGGGSAVPDAPAS------TCGS
Pacle-BMAL1A      SEYLNSPDPNHNQDTSPIGGAGSNNSNSRLIGGGIQAGKIGRGIADEVLDNQWKNDSTCK
Ep-BMAL1          SEFINSPG----------GGSSSSVSSSRMMGNGVQANKIGRKIAEEILDPHRRPESPAS


Drome-CYC         ------------------------------------------------------------
Tal-BMAL1         DVTDSYTVIQGQAVGSSSLASIQMARAVSGDGSDDTASQCRASGAGEMVSDQPSTEGKDA
Pacle-BMAL1A      SPVSPFEGILGSGASDRSFAALLRSDMTAHRTNVKNNAVLSSNTSTCSESDTSRSTQLSN
Ep-BMAL1          TPISPLEAILG-ANSDRSFSSLLKPETDSSR--MMN--ICGSSTDTSVDSDSTSKQQAAK


Drome-CYC         ------------------------------------------------------------
Tal-BMAL1         SSGDGNPLQLN--LDVPARLPFLHHYN---------------ARSESEASGVGEATSDSD
Pacle-BMAL1A      NHHRLPSMHNNNLINSSERGGSFSHNNSHRQPVS---NEGDLMDVVSGRDLETDGTSDSD
Ep-BMAL1          SHKPLLPPQ------PPKPENTLNHTNNHLQQVAQVPNNTDLMDVVSGRDVESEVTSDSD
```

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Drome-CYC          --------------------------------
Tal-BMAL1          EAAMAIIMSLLEADAGLGGPAD----------
Pacle-BMAL1A       EAAMAVIMSLLEADAGLGGPVDFSHLPWPLP
Ep-BMAL1           EAAMAVIMSLLEADAGLGEPVDFSHLPWPLP
```

Figure S5. Putative *Talitrus saltator* BMAL1 protein

Alignment of *Drosophila melanogaster* CYC (Drome-CYC; Accession No. AAF49107) with the *T. saltator* BMAL1 (Tal-BMAL1) deduced from the Trinity *de novo* transcriptome assembly, together with the top two tblastn species homologue sequences *Pacifastacus leniusculus* BMAL1A (Pacle-BMAL1A; Accession No. JQ670886) and *Eurydice pulchra* BMAL1 (Ep-BMAL1; Accession No. KC885968). '*' indicates identical amino acid residues in the two proteins, '.' and ':' indicate similar amino acid residues between the two proteins. In this figure SMART identified domains of bHLH domain, PAS domains and PAC domain are highlighted in yellow, green and blue respectively. Red text indicates sequence with high similarity to C-terminal transactivation domain of *Mus musculus* BMAL1.