

Supplemental Fig. S1. Specificity of anti-H1 antiserum analyzed by competition assay: Purified H1 (200ng and 100ng) was resolved in SDS-PAGE and transferred onto nitrocellulose prior to being immunorevealed with antisera to Physarum H1. The sera was either pre-incubated with 0.1mM of H1 75-89 peptide or not.

HayesThiriet_Supp data

AAAPAAATG PQSSTTSTGA AHSAAAPAT AAVSAGSAGS SPSAAAPGA PATSSTTTT SVAAAGSAGS SGTSTSTSSS **PTATLQAI VAQKAGVS QAALIKLA HKNDFTTHV KSAIKLME HTIARKEK** QDTLRAQK SGTSE

GH1/5 e-value 4.35 e-03

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|GGH5_1/1-66 SAS P . . TYS E . . . . . RDA T RAE . . . . . SNG SGRQS QNY MKN-YKVGH MA---DL QIKLS IKRL .AA QKQT GV
Physarum H1 HKS S . . PT& T . . . . . AIQ I VAQ . . . . . AG UBRQ I I H VLAH--HKDF TE---T HUKSA IKLME REHET IARKE GK
H1A_PLADU/1-67 AAA P . . PVA T . . . . . VVT I LGH . . . . . AK SSHV IKY LAN-YKVDV AR---LAP FIKKF IKK .KQT KGTGS GS
H1B_PLADU/1-67 AAT P . . PVA T . . . . . AVA E LGH . . . . . DK SSHV IKY LAN-YKVDV AR---LGP FIKKF IKK .AE M VQNM GS
H11_GLYSA/1-67 IPT P . . PVS E . . . . . VVM L KTH . . . . . NKG SSVI IKK LVA-T-YKVEI EK---LLP FIKKF IKK .LK EVLQV GT
H15_MOUSE/1-66 KATGP . . PVS E . . . . . LTK V SAS . . . . . G USLP LKA L&GGYDVEK MN---S RIKLG IKSL .SK T VQNT GT
H1_PEA/1-67 PAS P . . TYE E . . . . . KKD I VST . . . . . KMN SSOY IAF EEK-QKQLP AN---FKK LLLQM IKK .AS K IKKV GS
H1_YEAST/1-69 EASSK . . SYR E . . . . . LIEGL TRD . . . . . NK SGRP LKR KEN-YPIVG SASN . . . . . EDL YFMA IKK .EA DFEQP GP
B4_XENLA/1-68 TQS P . . PTL S . . . . . VVEVL KKN . . . . . TK TVQ IETR LLS&HPTVDP LR---LKF LLRTA MKGL .EK I ITRPL NS
Consensus/60* sssHP . . . . . sb . . . . . Mlhp&I ptL . . . . . KERs G88b .AipKa Ipp . . . . . aph . s ss . . . . . bpp b1pbhL+hV . . . . . GpLlp=K ts
  
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Supplemental Fig. S2: Linker histone alignment. Top sequence corresponds to Physarum H1. Shown in red is the globular domain with the three helices. The bottom panel depicts the alignment of globular domain of linker histones from various species.

ng/ μ MP	0	10	20	40	80
Mitosis	0.95	0.98	1	0.99	1.07
2h of S-phase	0.85	0.90	1	0.37	0.17

Table S1: Dose response to H1 siRNA. Macroplasmodia (MPI) were treated with various amount of H1 siRNA and amount of H1 was determined by Western blotting from nuclei prepared at mitosis or 2h after mitosis relative to our internal controls X and Y. Note that all our experiments of effects of H1 were carried out with 80 of H1 siRNA/_ macroplasmodium

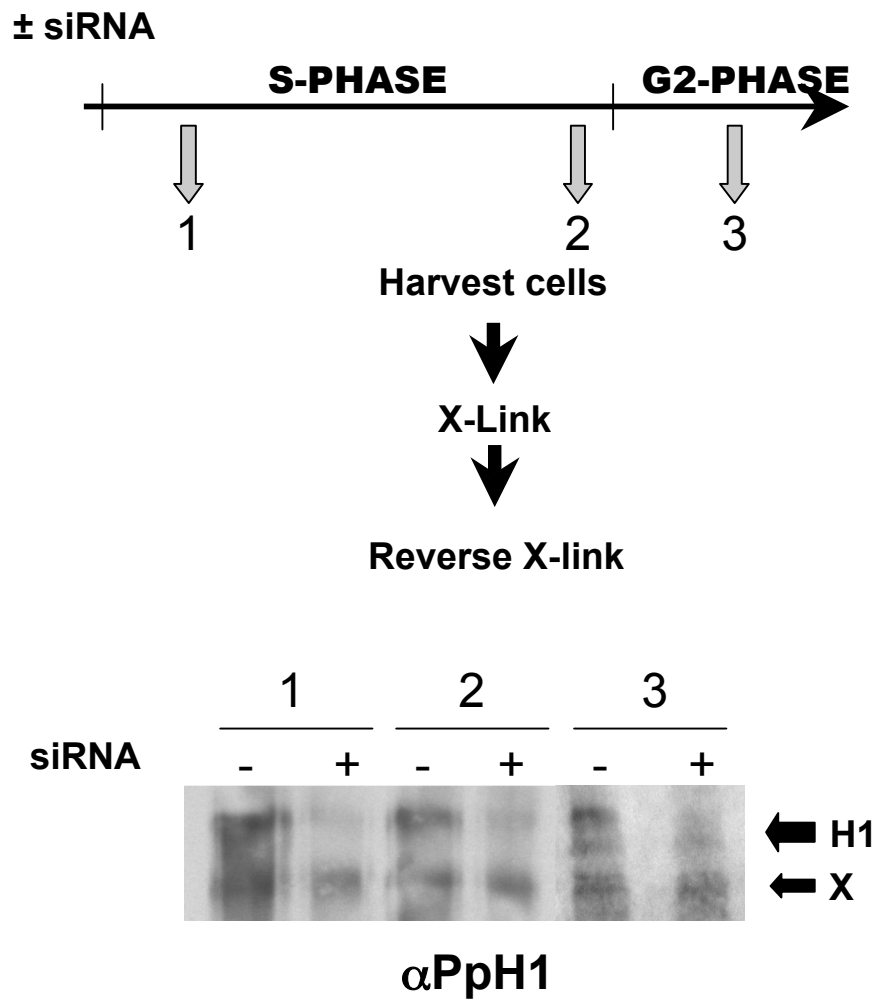


Fig. S3. Western blot showing PpH1 from cells treated or untreated with H1 siRNA harvested at the three different time points indicated