

Supplemental Table 1: Sequences of synthetic histone tail peptides used in binding experiments

Name	Sequence
H2A	SGGKGGKAGSAAKASQSRSK-GGK-biotin
H2AZ	SGKAHGGKSGAKDSGLRS-GGK-biotin
H2B	PEPSKSAPAPKKGSKKAITKA-GGK-biotin
H3	ARTKQTARKSTGGKAPRKQLA-GGK-biotin
Ac-(K9,14)-H3	ART _[AcK] QTAR _[AcK] STGGKAPRKQLA-GGK-biotin
Me-(K4)-H3	ART _[meK] QTARKSTGGKAPRKQLA-GGK-biotin
Me ₃ -(K4)-H3	ART _[me3K] QTARKSTGGKAPRKQLA-GGK-biotin
H4	SGRGKGGKGLGKGGAKRHRKV-GGK-biotin
Ac-(K5,8,12,16)-H4	SGRG _[AcK] GG _[AcK] GLG _[AcK] GGA _[AcK] RH-GSGSK-biotin
Ac-(K5,12)-H4	SGRG _[AcK] GGKGLG _[AcK] GGAKRH-GSGSK-biotin
Ac-(K8,16)-H4	SGRGKGG _[AcK] GLGKGG _[AcK] RH-GSGSK-biotin
Ac-(K8)-H4	SGRGKGG _[AcK] GLGKGGAKRHRC-GSGSK-biotin
Ac-(K12)-H4	SGRGKGGKGLG _[AcK] GGAKRHRC-GSGSK-biotin
Ac-(K16)-H4	SGRGKGGKGLGKGG _[AcK] RHRC-GSGSK-biotin

Supplementary Information 2 – Amino Acid Sequence of ts mutants aligned to wild type sequence. Locations where a base pair change led to a change in the coding sequence are highlighted in red.

Med8

<i>med8-39</i>	MSQSTASRVPEGNQGSLOKDVSFDFNGVPGQALDAVRMRLAQLTHSLRRIRDEVSKAGLP	60
<i>WT MED8</i>	MSQSTASLVPEGNQGSLOEDVSFDFNGVPGQALDAVRMRLAQLTHSLRRIRDEMСКАELP	60
<i>med8-39</i>	QWYTLQSQLNVTLSQLVSVTSTLQHFQETLDSTVVYPLPKFPTTSHESLVATLLRKK SIP	120
<i>WT MED8</i>	QWYTLQSQLNVTLSQLVSVTSTLQHFQETLDSTVVYPLPKFPTTSHESLVTLLRKK NIP	120
<i>med8-39</i>	EVDEWMKYVGGTSGVTTALLKDEEIEMLLQODREITNWARTTYRNEYGERDFKNEESLCE	180
<i>WT MED8</i>	EVDEWMKYVRETSVTTALLKDEEIEKLLQODREITNWARTTYRNEYGKHDFKNEESLSE	180
<i>med8-39</i>	EHASLLVRDSKPSKPFNVDDVLKSTFTWEKPIITGSTPTSSSN	223
<i>WT MED8</i>	EHASLLVRDSKPSKPFNVDDVLKFTFTGEKPIITGSTSTSSSN	223

Med4

<i>med4-6</i>	MSVQDTKAVEFSMGHIRSSSVSLVAEATSNTNSEDKLSKVQLYEELWRYEDTLSKLVESV	60
<i>WT MED4</i>	MSVQDTKAVEFSMGHIRSSSVSLVAEATSNTNSEDKLSKVQLYEDLCRYEDTLSKLVESV	60
<i>mutant</i>	DRFKPNLDIAKDLIRADEALFENVKLLAEYDNIYRNLOEIDKDSEELDSKTRKILEDPNE	120
<i>WT MED4</i>	DRFKPNLDIAKDLIRTDALFENVKLLAEYDNIYRNLOKIDKDSEELDSKTRKILEILNE	120
<i>mutant</i>	CHDGLKALPTLEQVEFEKNAIILQQRSKVNSTELLDYATKLSKFAKIPPTFGKGAVGPNNF	180
<i>WT MED4</i>	CHDELKALPMLEQVEFEKNTIILQQRSKINSTELLDYATKLSKFTKIPPTFDKGAVGPNNF	180
<i>mutant</i>	IWPAEDALRGGMLAMASLHSELTRIPGEEVEETEVPPTVPPSQSEEQKGOMAKKEGTPKT	240
<i>WT MED4</i>	IWPAEDALRRGMLAMASLHSELTRIPGEEVEETEVPPTVPPSQSEEQKGOMAKKEGTPKT	240
<i>mutant</i>	DSFIFDGTAKVEGDEADDTKDEEKEENNDALDLDLDFGPDDF	284
<i>WT MED4</i>	DSFIFDGTAKVEGDEADNTKDKEEENNDALDLDLDFDPDDF	284

Med7

<i>med7-163</i>	MSNDPGNEVSSLYPPPPPVKFFFTQSNLEKLPKYKEKKAASAKQTAPNNSNGGSEEEITC	60
<i>WT MED7</i>	MSNDPGNEVSSLYPPPPPVKFFFTQSNLEKLPKYKEKKAASAKQTAPNNSNGGSEEEITC	60
<i>med7-163</i>	ALDYLTTPPPMPRNQQYRAFGSIRQVKDQLPDLESMLTQLYKKSTENESTNYQCKIQELR	12
<i>WT MED7</i>	ALDYLI PPPMPKNQQYRAFGSIWQVKDQLPDLESMLTQLYKKSTENESTNYQYKIQLR	120
<i>med7-163</i>	KLLKSLLLNYLEPIGVSS TNPDMYERKVENIRTI LVDIHLLNEYPHQSRRESLIVLLEE	1
<i>WT MED7</i>	KLLKSLLLNYLELIGVLSINPDMYERKVENIRTI L VNIHLLNEYPHQSRRESLIMLLEE	180
<i>med7-163</i>	QLEYKRGEIREIEQV CERVHGKLT SIQDTLRTGSQSPSSSQ	222
<i>WT MED7</i>	QLEYKRGEIREIEQVCKQVHDKLT SIQDTLRTGSQSPSSSQ	222