A

```
PfH2A.Z     -------------------------MEVPGKVIGGKVGGKVGGKVLGLGKGGKGKTGSGKT-K  38
TgH2A.Z     -------------------------MDGAGKV-GGKVGGKVGGKVGGMGKGGKGKSGSGKG-K  37
HsH2A.Z     ------------------------------------------------MAGGKAGKDSGKA-K  15
TbH2A.Z     MSLTGDDAVPQAPLVGGVAMSPEQASALTGGKLGGKAVGPAHGKGKGKGKGKRGGKTGGKAGR  63
PfH2A       ---------------------------------------------------MSAKGKTGRKKASK  14
TgH2A       ---------------------------------------------------MSAKGAGGRKKTSS  14
HsH2A       ---------------------------------------------------MSGRGKQGGKARAK  14
TbH2A       ---------------------------------------------------MATPKQAVKKASK  13

PfH2A.Z     KAPLSRASRAGLQFPVGRVHRMLKSRISSDGRVGSTAAVYAAAILEYLTAEVLELAGNATKDL 100
TgH2A.Z     KAPLSRAARAGLQFPVGRVHRMLKSRISSEGRVGSTAAVYASAILEYLTAEVLELAGNASKDL  99
HsH2A.Z     TKAVSRSQRAGLQFPVGRIHRHLKSRTTSHGRVGATAAVYSAAILEYLTAEVLELAGNASKDL  77
TbH2A.Z     RDKMTRAARADLNFPVGRIHSRLKDGLNRKQRCGASAAIYCAALLEYLTSEVIELAGAAAKAQ 126
PfH2A       G--TSNSAKAGLQFPVGRIGRYLKKGKYAK-RVGAGAPVYLAAVLEYLCAEILELAGNAARDN  74
TgH2A       GKKVSRSAKAGLQFPVSRIGRYLKKGRYAK-RVGVGAPVYLAAVLEYLCAEILELAGNAARDH  76
HsH2A       A--KTRSSRAGLQFPVGRVHRLLRKGNYAE-RVGAGAPVYLAAVLEYLTAEILELAGNAARDN  74
TbH2A       GG-SSRSVKAGLIFPVGRVGTLLRRGQYAR-RIGASGAVYMAAVLEYLTAELLELSVKAAAQQ  74
                  :.: :*.* ***.*:   *:        * *  ..:* :*:**** :*::**:*:

PfH2A.Z     --KVKRITPRHLQLAIRGDEELDTLIK-ATIAGGGVIPHIHKALMNKVPLPPTAQKKPKKN   158
TgH2A.Z     --KVKRITPRHLQLAIRGDEELDTLIK-ATIAGGGVIPHIHKSLMTKGPSTQPMKKAKK--   155
HsH2A.Z     --KVKRITPRHLQLAIRGDEELDSLIK-ATIAGGGVIPHIHKSLIGKKGQQKTV-------   128
TbH2A.Z     --KTERIKPRHLLLAIRGDEELNQIVN-ATIARGGVVPFVHKSLEKKIIKKSKRGS-----   179
PfH2A       --KKSRITPRHIQLAVRNDEELNKFLAGVTFASGGVLPNIHNVLLPKKSQLKAGT-ANQDY   132
TgH2A       --KKTRIIPRHIQLAVRNDEELSKFLGGVTIANGGVMPHVHAVLLPKHSKSKGKHGVSQEF   135
HsH2A       --KKTRIIPRHLQLAIRNDEELNKLLGKVTIAQGGVLPNIQAVLLPKKTESHHKAKGK---   130
TbH2A       TKKTKRLTPRTVTLAVRHDDDLGALLRNVTMSRGGVMPSLNKALAKKQKSGKHAKATPSV-   134
              *  *: ** : **:* *::*. ::  .*:: ***:* ::  *  *
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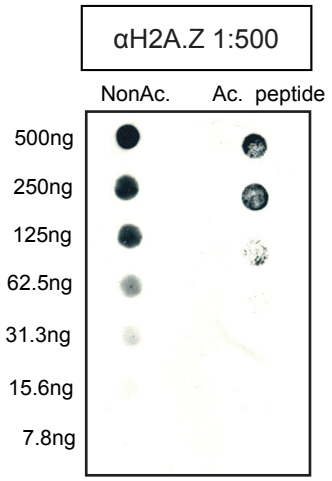
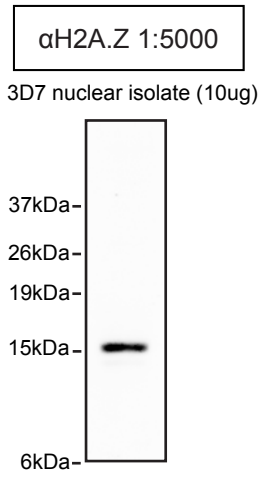
B



C