CONCLUSIONS

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- Almenys els primers 6 residus de la histona H1º constitueixen una regió no carregada que sembla no tenir capacitat d'adquirir estructura secundària definida.

- El domini N-terminal de la H1º té la capacitat d'estructurar-se en una hèlix α que comprèn del residu 11, potser fins i tot des del 7, al 23.

- L'hèlix del domini N-terminal de la H1º comprèn els residus 21, 22 i 23, propis del domini globular. Per tant, el límit entre els dominis N-terminal i globular, definits tradicionalment per digestió tríptica, no coincideixen exactament amb els dominis estructurals. Proposem que el domini estructural N-terminal de la H1º comprèn del residu 1 al 23 i que el domini globular comença al residu 24.

- L'hèlix del domini N-terminal de la H1º presenta dues agrupacions de tres cadenes laterals bàsiques cadascuna, situades en cares oposades de l'hèlix i que probablement constitueixen llocs d'unió a segments de DNA no consecutius.

- El domini N-terminal de la H1º unit al DNA s'estructura en part en hèlix, molt probablement en la mateixa regió que s'estructura en presència de TFE.

- El domini N-terminal de la histona H1e s'estructura en dues hèlixs consecutives que avarquen del residu 17 al 27 i del 29 al 34, i probablement fins el 35.

- La segona hèlix del domini N-terminal de la H1e comprèn residus del domini globular definit per digestió tríptica. A nivell estructural, proposem que els dominis N-terminal i globular de la histona H1e es troben separats pel motiu Pro37-Pro38.

- Les dues hèlixs del domini N-terminal de la H1e es troben separades per un doblet de glicines que actua com a frontissa, donant una gran llibertat en la orientació relativa de les dues hèlixs.

- Les hèlixs del domini N-terminal de la H1e són amfipàtiques, amb les cadenes laterals dels residus bàsics situades en una cara de l'hèlix i dels residus apolars en l'altra cara. Constitueixen, probablement, un motiu d'unió al solc ample del DNA.

- La regió del domini C-terminal de la histona H1º que segueix al domini globular, s'estructura en una hèlix (residus 99 a 117) seguida d'un gir β o/i σ tipus I (residus 118 a 121).

- L'hèlix del domini C-terminal de la histona H1º és amfipàtica, amb les cadenes laterals dels 8 residus bàsics situades en una cara de l'hèlix i els 6 residus apolars en l'altra cara. Constitueix, probablement, un motiu d'unió al solc ample del DNA.

- El gir β o/i σ del domini C-terminal de la H1º és un motiu del tipus (S/T)-P-(K/R)-(K/R), descrit com a un lloc d'unió al solc estret del DNA.

- La regió del domini C-terminal de la histona H1º que segueix al domini globular s'estructura en hèlix α, hèlix 3_{10} i girs a l'unir-se al DNA, probablement en una estructura molt similar a la induïda pel TFE.

Per tant, les conclusions generals més importants que es poden extreure d'aquest treball són:

- El DNA indueix estructura secundària en regions dels dominis N- i C-terminals de les H1, concretament hèlixs α, hèlix 3_{10} i girs.

- El TFE revela l'estructura secundària que adopten els pèptids un cop units al DNA i permet el seu estudi a alta resolució.

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