

Nucleotide sequence of the HU-1 gene of *Salmonella typhimurium*

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Bacterial cells contain a class of small, basic, heat stable "histone-like" proteins which are thought to condense the chromosome into a tightly folded nucleoid structure (1). The most abundant of these proteins, HU, is present in *E. coli* and *Salmonella* as a heterotypic dimer whose subunits are encoded by the hupA and hupB genes (2,3). We report here the nucleotide sequence of the hupB gene of *Salmonella typhimurium* and its comparison with the *E. coli* sequence. The protein predicted by the *Salmonella* sequence is highly conserved and differs from the *E. coli* protein only at amino acid position 8 despite the presence of 20 other conservative changes in the sequence.

TIGATTGGST	CTCGCCAOCAT	TAAGGSGT	TGTAAGGGG	TGCCAGGCT	GATATAACTG	1-60
		G	G	T		
COGOGGSGTC	GTACTTOSAA	GATTCAGGIG	CGATATAAAT	TATAANGAGG	AGGAGAAGA	61-119
T T	C T A G	A		G		
M N K S Q L I E* K I A A G A D I S K A A						
G T G A A T A A A T C T C A A C T G A T A T C G A A A A A T T G C T G C A G G G C T G A T A T C T C T A G G C T G G G						120-179
	T	C G			A	
A G R A L D A I I A S V T E S L K E G D						
G C T G G A C G T G G G T T A G A T G C G A T T A T T G C T T C T G I T A C C G A A T C T C T G A A A G A A G G G G A T						180-239
	C		T	C A T		
D V A L V G F G T F A V K E R A A R T G						
G A C G I T G C A C T G G T A G C G C T T T T G G T A C T T T T G C T G I T A A A G A G C G T G C T G C C C G T A C T G G T						240-299
	T A	T	C		C	
R N P Q T C K E I T I A A A K V P S F R						
O G C A A C C G C A A A C A G C T A A A G A G A T C A C C A T C G C C G C T G C C A A A G T G C G G A G T T T C G C T						300-359
	G C			T T	A C	
A G K A L K D A V N						
G C A G G T A A A G C G C T G A A A G A C G C G G T A A A C T A A G C G T G A T C C C C T G G G G G G A T G T G A C A A						360-419
	A			T G	A G T	G
AGTACAAGG	CGCATCACT	GATTCGCCTT	TTTTATTTGG	GATTCGGACT	TTCTGTGG	420-478
T	T		T - T	T G A	C T C	

References:

1. Drilca, K., and Rouviere-Yaniv, J. Microbiol Rev. 51,301-319. (1987)
2. Kano, Y. et al., Mol. Gen. Genet. 201, 360-362 (1985).
3. Kano, Y. et al., Mol. Gen. Genet. 209, 408-410 (1987).