

ПРИЧИНЫ СИММЕТРИИ В ДНК

90- XX .
 «
 ».
 [1 – 3].
 (,),
 [4–7].
 (A),
 (C), (G), (T).
 C – G, A – T –
 A T, C G,
) , (

.....

.....

$$n(ij) = n(\overline{ji}), \tag{1}$$

$i, j \in \{A, C, G, T\}, \overline{A} = T, \overline{C} = G, \overline{T} = A, \overline{G} = C.$, AT, TA,
 CG GC (1), (1)

.....

.....

$$n(ij) = n(\overline{ij}). \tag{2}$$

AT, TA, CG GC (1) (2),

2.

-					-
	T	C	A	G	
T					T C A G
C					T C A G
A					T C A G
G			. - . - . - . -		T C A G

3.

-					-
	T	C	A	G	
T					T C A G
C					T C A G
A					T C A G
G		. - . - . - . -			T C A G

.....

. 2
« 90 »
-
-
-
80 %
. 4

4.

GCA	ACA	
CGG	TGG	
ATA	ACA	
ATC	ACC	
GCC	ACC	
CGC	TGC	

-
-
-
-
-
80 %
-

... , M.A.

80 %

A.M. Gupal, M.A. Gupal

A REASON OF SYMMETRY IN DNA

On the basis of mathematical formulas, uncommon rules of symmetry order decrease and the rule of symmetry order increase are obtained. The code symmetric with respect to polarity of amino acids with mutations in nucleotides, a noise immunity of which significantly exceeds one of the standard codes, is constructed using DNA symmetry. The symmetric code has corrected the polarity disturbance in codon mutations in 80% of cases. Thus, the polarity disturbances of amino acids have an appreciable influence on disease onsets.

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