

The Mole-structural Biology in Electromagnetic Structure of Space-time

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Abstract The evaluation of electromagnetic structure of space-time has been facilitated to determine synthesis of amino acids under codon-anticodon assignment and have been shown in different aspects. The events of amino acid synthesis in the polypeptide chain are specified by the molecular points or space-time points in the structure can be complemented in terms of codon. The infiltration of anti-gravitational impulses into electromagnetic structure of space-time concerned to methionine involvement, bisectional processes and structural mutations in p53 are mathematically shown towards predictability of directional gravity.

Keywords Space-time, Codon-anticodon, P53 protein, Structural & Molecular biology

1. Introduction

In this paper 'electro-magnetic structure' refers to space-time structure that in compliance with sub-atomic particles masses i.e. electron ($e^- = 0.511\text{Mev}/c^2$) and proton ($p^+ = 938.29\text{Mev}/c^2$) in the context of biology. The mole-structural biology refers to molecular and structural biology is integrated and it would be structural biology acts as a template for molecular biology. Derived from TP53 gene, p53 protein molecule is a standard molecule that exhibits points in space-time and shows systematic structural mutations.

2. Discussion

The position where directions of time is in equilibrium i.e. $27 \times 0.0107 = 0.2889 = 0.321 - 0.0321 = 152 \times 0.0019$ is a significant position where gravitational and anti-gravitational time are sustained [1].

This also satisfies p53 protein manifestation like $152(\text{pro}) + 27(\text{pro}) = 179(\text{his}) = 358(\text{CAU}) / 2$.

$0.0875(\text{pro core values}) \times 2 = 0.1750 = 0.1393(\text{his core values}) + 0.0357$.

Again, $27 \times 0.0019 = 0.0513$ or, 270 space-time point or molecular point = 0.513 meets to electronic mass with 0.0020 i.e. approximately one molecule (0.0019) time difference.

Again, $270(0.513) / 3 = 90(0.171)$ in triplet structural

mechanism of biology. Space-time point and its corresponding mass or time has been shown side by side. Considering one molecule difference the values actually represents $89(0.1691)$ where $0.1691 = 0.1602$ (lunar gravity) + 0.0089.

Amino acids starts with Gly(75.0669) and on structural considerations, $75.0669 - 2 \times 14.0267 = 47.0135$. Now, $2 \times 47.0135 = 94.0270$ that can be represented as 940.270.

$270(0.513)$ and $940(0.270)$ may be called a mathematically devised electromagnetic structure of space-time.

It is significant that the molecular weight of alanine is 89.0935 g/mol where 0.0935 is the time form of proton mass $938\text{Mev}/c^2$ with 0.0003 time difference.

Now, $938 - 513 = 425 = 367(\text{earth-moon curvature}) + 57$ with one molecule difference that makes '57' a significant bisection and replication factor since $367 = 2 \times 183(\text{lunar time}) + 1$.

It is a general tendency that time runs to reach 0.0367(earth-moon time curvature) but attaining in this point time bisects since $14 + 100 = 0.0267 + 0.0100$ i.e. $114.0.0367$ where $114 = 2 \times 57$ and $0.0367 = 2 \times 0.0183$ where $183 \times 0.0019 = 0.3477(\text{lunar time})$.

In the loop of t-RNA the anti-codon maintain a constant distance of 66\AA from the acceptor point C-C-A(357) [2] that would conforms to electromagnetic structure of space-time since $937 - 513 = 424 = 357 + 66 = 367 + 57$ with one molecule difference and also $357 - 66 = 291$ is a significant structural value where $938 - 357 = 581 = 291 \times 2$.

Correspondingly, $414(\text{GGU}) + 66 = 480 = 936 - 456(\text{GGG} + 3)$ and $414 - 66 = 348$ where $936 - 348 = 588 = 333(\text{CCC}) + 255$.

Again, $480 = 423 + 57 = 225(\text{bisection of GGG} - 3) + 255$ are structural values found in oncogenic mutations of p53.

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Both negative and positive side calculation has a meaningful value in the structure.

SAR codon-anticodon complex:

A serine (105.093)-alanine (89.0935)-Arginine (174.2017) interrelation is in consensus to electromagnetic structure of space-time.

The core value (C_v) of serine = $105 \times 0.0019 - 0.0930 = 0.1065$ while that of alanine = $89 \times 0.0019 - 0.0935 = 0.0756$ and $0.1065 - 0.0756 = 0.0309$ is bisection of $0.0618 = 0.0513 + 0.0105$.

Now, $49 \times 0.0019 = 0.0931$ that shows $105 - 49 = 56$ (bisection factor) for serine.

The trans-gravitational value (T_v) of alanine = $0.0935 - 0.0089 = 0.0846$ and $0.0846 / 2 = 0.0423 = 0.0936 - 0.0513$ while alanine core values = $0.0756 = 0.0423 + 0.0333$.

The climax where the anti-gravitational influx torn out and transit to gravitational arena is said to be trans-gravitational value (T_v).

The bisection of serine core values = $0.1066 / 2 = 0.0533 = 0.1289$ (core values of Arg) - 0.0756 (core values of Ala). The bisection of Arg core values = $0.1290 / 2 = 0.0645$ where $0.0645 + 0.0423 = 0.1068$.

A time difference of 3 or 0.0003 or 0.0057 has been found in many places both in positive or negative side in the structure.

Methionine nexus to electromagnetic structure of space-time:

According to p53 protein F270, $165.19(\text{phe}) + 105.093(\text{ser}) = 270.2830$ where $149(\text{met vt}) \times 0.0019 = 0.2831$.

Again, $149.2124(\text{met}) + 121.1590(\text{cys}) = 270.3714$ where $270 \times 0.0019 - 0.3714 = 0.1416 = 0.2832 / 2$ (bisected).

Again, $181.1894(\text{tyr}) + 89.0935(\text{ala}) = 270.2830$.

Again, $155.1552(\text{his}) + 115.1310(\text{pro}) = 270.2862$ where $0.2862 = 0.2830 + 0.0032$ (oxygenation).

The above calculation shows $267 + 3 = 270$ possess a timeline in the electronic space-time structure and $0.0938 \times 3 = 0.2830 - 0.0016$ (de-oxygenation) in the system.

$938 - 513 = 425 = 273 + 152$ (i.e. $149 + 3$) = 304 (oxy-time) + 120 (difference of gly-pro) is significant in the structure.

About p53 protein molecule and structural mutations:

P53 is a bisected molecule of $(453^{\text{GGG}} + 333^{\text{CCC}}) / 2 = 393$ where $(453 - 333) + 393 = 513$.

It is seen $453 - 333 = 120 = 0.0875$ (core values of pro) - 0.0756 (core values of gly) with one molecule difference.

P53 would be called an oxygenated molecule since $393 = 304 + 89$ or $571 = 304 + 267$ where $571 - 393 = 179 - 1$ and $179 = 27 + 152 = 252(\text{TT}) - 73$ (polymorphic site in p53) are structural matters and would liable to respiration of oxygen into the system while gravity or anti-gravity possess contraction and expansion properties e.g. $16 \times 0.0019 = 0.0304 = 304 = 178 + 126(\text{T})$. Again, $393 = 304 + 89$ gives $16 + 89 = 105 = 178 - 73$ and $89 - 16 = 73$ are structural matters.

'72' = $73 - 1 = 393 - 321$ is called polymorphic site where $72 = 56$ (bisection or replication factor) + 16 (oxygenation) makes the site special.

P53 is an ideal protein molecule which exhibits molecular points or space-time points which would be possessed negative and positive interactions causing deletions.

P53 molecule has been found in cancerous cell where oncogenic mutations breaks down the fundamental structure of the molecule and would impair the oxygenation system tends to lethality. M133L, R282W etc. are some mutations where molecular point-133 is specified for methionine (149.2124) and so on and mutations in these sites results structural distortion. The M133 can be shown as follows in the structure.

$266(\text{gly}) / 2 = 133$ follows $89 \times 2 = 178 = 267 - 89(\text{pro}) = 152(\text{pro}) + 27(\text{pro}) - 1$.

Now, core values of Gly = $75 \times 0.0019 - 0.0669 = 0.0756$ while core values of Met stands $149 \times 0.0019 - 0.2124 = 0.0707$ that differed by $0.0756 - 0.0707 = 0.0049 = 49$ and would corresponds to $\text{GGG}(454) / 2 - 49 = 178$ in the structure.

The mutational values of M133L is $0.0707(\text{met } c_v) - 0.0753(\text{leu } c_v) = (-) 0.0046 = (-) 46$ that would be added to molecular point-133 yielding $133 + 46 = 179$ shows mutational possibility. The Met vt-149 is concerned to $133 + 16$ (oxygenation) in p53 molecule shows thermo-stability.

The mutational values of R282W also gives negative values as $(-) 326$ and gives $282 + 326 = 608 = 2 \times 304 = 393 + 107 \times 2 + 1$ where $393 - 215 = 178$.

It is revealed out mutational values, mutated amino acid distances, p53 amplification (393) is interrelated. It is seen the mutation in bisectonal site is detrimental likely in most of the cases.

R249S, H168R, R273H are associated with molecular point distances or space-time points [3].

Mutational site- $249 \times 2 - 393 = 105$ which corresponds to $273 - 168 = 105$ and also with mutational values $0.1393(\text{HC}_v) - 0.1289(\text{RC}_v) = 0.0105$ with 0.0001 time difference.

The bisection of $(453 - 3) / 2 = 225$ is a significant site occupied by Val and correspondingly $(333 + 3) / 2 = 168$ occupied by His. It is seen $225 - 57 = 168$ (mutation point) and $225 + 57 = 282$ (mutation point) are structural mutations where $393 + 57 = 450(\text{GGG} - 3)$ and $393 - 57 = 336(\text{CCC} + 3)$.

M133L / V203A / N239Y / N268D are super-stable quadruple mutants [4] clarified as follows.

The mutational values of M133L and V203A are respectively $(-) 46$ and $(-) 2$.

Stabilized mutation means oxygenation(+16) of the site while destabilization means $(-) 16$ developing the concept of real and apparent site.

Now, $133 + 16 = 149$ (site and met vertical time coincides) while $133 + 46 = 179 = 152 + 27$.

Now, $203 + 2 = 205 = 221 - 16$ and $393 - (133 + 203) = 57$.

Again, $171 + 16 = 187$ (apparent site) = $203 - 16$ shows $179 + 187 = 367$ (earth-moon curvature) - 1.

The mutational values of N23Y and N268D are respectively $(-) 221$ and $(-) 171$.

Now, $221 + 171 = 393$ (p53 amplification) and $(268 + 239) - 393 = 114 = 2 \times 57$.

Again, $268 - 239 = 29$ and $393 + 29 = 423 - 1$ that stabilizing the electromagnetic structure.

Here are some highly destabilizing mutations have been clarified.

V157F provides mutational values (-) $481 = 225 + 255$ (would be associated with I255F) and it is significant that bisection of $(453 - 3) / 2 = 225$ is not a mutation point in the structure.

Again, $393 - 157 * 2 = 79$ where $225 - 79 = 146$ would be associated with L145Q and $255 - 79 = 176$ would be associated with R175H.

Again, $481 - 79 = 402 = 146 + 256$ are related to L145Q and I255F.

V143A provides the mutational values (-) 2 and thus would associated with $143 + 2 = 145$ (L145Q).

The mutational values of L145Q = (-) $0.0570 = (-) 570$.

Now, $145 + 570 = 715 = 393 + 321 + 1$ where $393 - 321 = 72$ (polymorphic site) and $72 + 73 = 145$ i.e. L145Q.

I shall discuss here about same mutations but in different sites e.g. F134L & F270L and R175H & R273H and I195T & I232T.

It is seen that $482 = 304 + 178 = 225 + 255 + 2$ and also $304 - 178 = 126$ (T) are structural matters in the system.

F270L and F134L are related as follows.

Here, $270 - 134 = 136 = 79 + 57$ in the structure and mutational values provides $482 = 304 + 178$.

Now, $482 + 136 = 618 = 393 + 225$ and $393 - 225 = 168$ (H168R) and also $304 - 168 = 136$.

R175H & R273H are related as follows.

Here, $273 - 175 = 98$ and the mutational values provides (-) 104.

Now, $175 + 104 = 279$ and $273 + 104 = 377$.

$393 - 279 = 114 = 2 * 57$ and $393 - 16 = 377$ makes R273H a hotspot mutation.

Moreover, $393 - 73 = 320 = 377 - 57$ and $393 + 73 = 466 = 377 + 89$ where $105 - 16 = 89$.

I195T & I232T are related as follows.

Here, $232 - 195 = 37$ and the mutational values provides (-) 311.

Now, $195 + 311 = 506$, $506 - 393 = 113 = 2 * 57 - 1$ and $(232 + 311) - 393 = 150$ where $150 + 37 = 187 = 336$ (CCC - 3) - 149 and $150 - 37 = 113 = 450 - 337$.

Impact of electro-magnetic space-time structure on amino acids synthesis:

It is significant that when 'values of difference' between electronic molecular point (270) and designated codon appears to '89' then influx of anti-gravitational (0.0107 unit) rotations shows a complete one or in approximation. The amino acids are taken on designated codon-anticodon sequence.

UUA(359)-Leu(131.1736)-AAU(382)-Asn(132.1184):

$359 - 270$ (AA) = 89 and correspondingly $0.1736 - 0.0131 = 0.1605 = 15 * 0.0107$.

Again, $382 - 270 = 112$, $112 * 0.0019 = 0.2128 = 0.1324$ (core values of asn) + $0.1608 / 2$.

AUG(398)-Met(149.2124)-UAC(358)-Tyr(181.1894):

$358 - 270 = 88$ and correspondingly $0.1894 - 0.0181 = 0.1713 = 16 * 0.0107$.

Again, $398 - 270 = 128 = 112 + 16$ that corresponds to $398 - 16 = 382$ and $382 - 270 = 112 = 0.2124$ (met ht with adjustable 0.0004 time difference).

Now, 0.1545 (Tyr core values) - $0.0707 * 2$ (Met core values * 2) = $0.0131 = 131 = 128 + 3$.

It is seen there are time sharing between Met-Tyr as follows.

$(149 * 0.0019 + 0.2124) - 0.1605 * 2 = 0.1745 = 0.1894 - 0.0149$.

Again, $(181 * 0.0019 + 0.1894) - 0.1605 * 2 = 0.2124$.

AAA(405)-Lys(146.1881)-UUU(336)-Phe(165.19):

$336 - 270 = 65 + 1$ where $65 * 0.0019 = 0.1235$ (core values of Phe).

$405 - 270 = 134 + 1$, $134 = 87 + 47$ where $47 * 0.0019 = 0.0893$ (core values of Lys) and $87 = 69$ (codon-anticodon difference) + 18 (Phe-Lys core values difference).

UGG(414)-Trp(204.2261)-ACC(357)-Thr(119.1197):

$357 - 270 = 87$ and correspondingly $0.1197 - 0.0119 = 0.1078 = 10 * 0.0107 + 0.0008$.

Again, $414 - 270 = 144 = (204 - 63) + 3 = 56 + 88$ where $85 * 0.0019 = 0.1615$ (core values of Trp) with difference of '3'.

The codon-anticodon difference = $414 - 357 = 56 + 1$ where $56 * 0.0019 = 0.1064$ (core values of Thr) and $0.1064 - 0.0513 = 0.0551 = 29$ in contraction form related to $29 + 56$ (values of difference) = $85 = 0.1615$ (core values of Trp).

Trp-Thr combination is clearly related to GGG(453)-CCC(333) structure since $453 - 333 = 119 + 1$ and Trp-Thr possess $119 * 0.0019 = 0.2261$ in positive and negative side. Otherwise, $453 + 333 = 786 = 414 + 357 + 16$ (oxygenation) with one molecule difference.

It is seen $204.2261 = 89.0935$ (ala) + 115.1310 (pro) + 0.0016.

3. Conclusions

Digital amplification of molecular points in protein is concerned to space-time points in structural foundation to molecular manifestation lies to deep meaning of nature. An in-vitro experimental concept may be carried out as 'cancer cell in zero-gravity region' to probe development of cancer.

REFERENCES

- [1] Sarkar. R.K., International journal of biophysics, vol.6(1), pp 4-6.
- [2] Strickberger Monroe W., 2010, Genetics (3rd ed), PHI Learning Private Ltd, p-556.
- [3] Joerger. A. C. et al, (2005) J. Biol. Chem. 280: 16030. www.iarc.fr, 2016.
- [4] Joerger. A. C. et al, (2004) J. Biol. Chem. 279: 1291. www.iarc.fr, 2016.