# ANVIUNPRO-2040(RC)

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## I. INTRODUCTION

After seeing immense sufferings and unbelievable losses incurred from covid-19, I dreamt of a typical concept which I coined as "anviunpro-$2040^{RC}$". Its expanded form is given below: "AntiViralUniversalProtein $2040^{RC}$" [RC: Ramachandran]

No doubt, this is 100% hypothetical and ever existed earlier and I am not sure whether any such product could be possible to synthesize. The previous basic idea behind this concept was 1.5 year old under the name "RCV-2020" [Ramachandran Concept of Virus-2020 where 2020 is not just the year but 20 polypeptide chains each having 20 α-amino acid moieties] where I opined that synthesis of such a typical protein will serve as an antiviral drug/product and I also described all the details of its synthesis in a laboratory by providing all necessary steps.

However, a very recently modified version of RCV-2020 by name UPUA-$2020^{RC}$ (universal protein-universal antivirus-2020) in which I proposed a very long polypeptide chain having 800 α-AA moieties which includes almost every possible combination (eg: AA-AG-AQ etc.,).

But, whatever information I got from a number of experts regarding this synthesis is that it is impossible (as on today) to make such a very long polypeptide chain by artificial means with 100% accuracy and a maximum of 50 α-AA based chain alone could be synthesized with suitable 3D-conformation (i.e a small protein like). So, I would like to modify my earlier UPUA-2020 & this present antiviunpro-$2040^{RC}$ is just like its eldest child. Here, the four digit numeral 2040 is also just like 2020 but, 20 polypeptide chains & 40 α-AA in each chain with specific sequence. I have arranged 40 α-AA in such a manner that each α-AA likely to pair with every other α-AA (i.e 19) including itself.

I hope, this new protein antiviunpro-$2040^{RC}$ may take its birth in near future that opens all possible doors to synthesize many such pharmaceutical drugs which have minimal level of side effects, if any.

**Synthesis of Polypeptide Chains [20]**
**Source: Naturally occurring α-amino acids and respective m-RNA based codons**
**Proposed Procedure**

Step-1: Synthesis of a polypeptide chain which starts with specific α-AA and the chain with all the other 19 α-AA moieties.

Step-2: Synthesis is carried out in such a way that, specific α-AA must pair with itself and also each of other 19 members.

Step-3: Once 20 such polypeptides are ready (*each has 40 α-AA moieties), all samples must be dissolved in suitable non-toxic solvent (water, ethanol etc.,) to prepare 20 samples.

Step-4: Mixing up of all 20 samples to get a mixture by name antiviunpro-2040RC where 20 polypeptide chains with definite 3D-conformation exist. There may be or may not be any sort of union (or combination) of two or more such chains to exist as 40 (quaternary) type protein.

## α- AA Sequences-(m)-RNA Templates

1. As each polypeptide must be rich in only one α-AA, amount of such α-AA to be selected shall be nearly 19 times that of each of other 19 members in terms of number (*or mole)

   **Eg: If a polypeptide chain-1 needs Alanine rich, then**,

   - [a] Amount of Alanine needed = 1.90 mol (say)
   - [b] Amount of each of other 19 α-AA needed = 0.10 mol hence total number of moles (all α-AA together) = 1.90 + 1.90 = 3.80

**Table 1**

| Name of α-AA | Letter Code | Nature | Optical activity | Molar mass |
|---|---|---|---|---|
| Alanine | [A] | Neutral | Active | 89 g/mol |
| Arginine | [R] | Basic | Active | 174 g/mol |
| Asparagine | [N] | Neutral | Active | 132 g/mol |
| Aspartic acid | [D] | Acidic | Active | 133 g/mol |
| Cysteine | [C] | Neutral | Active | 121 g/mol |
| Glutamine | [Q] | Neutral | Active | 146 g/mol |
| Glutamic acid | [E] | Acidic | Active | 147 g/mol |
| Glycine | [G] | Neutral | Inactive | 75 g/mol |
| Histidine | [H] | Basic | Active | 155 g/mol |
| Isoleucine | [I] | Neutral | Active | 131 g/mol |
| Leucine | [L] | Neutral | Active | 131 g/mol |
| Lysine | [K] | Basic | Active | 146 g/mol |
| Methionine* | [M] | Neutral | Active | 149 g/mol |
| Phenyl alanine | [F] | Neutral | Active | 165 g/mol |
| Proline** | [P] | Basic | Active | 115 g/mol |
| Serine | [S] | Neutral | Active | 105 g/mol |
| Threonine | [T] | Neutral | Active | 119 g/mol |
| Tryptophan | [W] | Basic | Active | 204 g/mol |
| Tyrosine | [Y] | Neutral | Active | 189 g/mol |
| Valine | [V] | Neutral | Active | 117 g/mol |

## Interactions among 20 (or even more) Poly-Peptide-Chains [PPCs]

In each PPC, only one specific amino acid moiety is found rich (by number) and based on number of hydrophobic and hydrophilic moieties in each PPC, the interaction between any two such PPC changes during their folding (from 10 to 20 to 30 levels).

For example, in PPC-1, the chain is rich in Alanine content (in number) and alanine has methyl part (hydrophobic) at α-position (*from COOH) apart from NH2 functional group.

But in case of PPC-11, 12 & 20, this hydrophobic character is greatly enhanced so, during the formation of 40 structure (or even 30 structure), these hydrophobic parts usually away from polar ends (i.e aqueous layer) which themselves act as protective shield towards the system but, readily interacts with viral proteinous part (*especially spike), thus does not allow it to interact with m- RNA of host. However, the way how a PPC behaves in the body is really an astonishing aspect.

Observe the following 20 PPC (sequence) where each α-AA is shown by its original single letter symbol only* [Read each chain from L to R only]

**40 α-AA -PPC-1 [ALANINE rich, % (by number) =52.5] [Solvent: Ethanol]**

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A | A | A | R | A | N | A | D | A | C | A | Q | A | E | A | G | A | H | A | I |
| A | L | A | K | A | M | A | F | A | P | A | S | A | T | A | W | A | Y | A | V |

**40 α-AA PPC-2 [ARGININE rich, % (by number) =52.5] [Solvent: Ethanol]**

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| R | R | R | N | R | D | R | C | R | Q | R | E | R | G | R | H | R | I | R | L |
| R | K | R | M | R | F | R | P | R | S | R | T | R | W | R | Y | R | V | R | A |

**40 α-AA PPC-3 [ASPARAGINE rich, % (by number) =52.5] [Solvent: Ethanol]**

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| N | N | N | D | N | C | N | Q | N | E | N | G | N | H | N | I | N | L | N | K |
| N | M | N | F | N | P | N | S | N | T | N | W | N | Y | N | V | N | A | N | R |

**40 α-AA PPC-4 [ASPARTIC ACID rich, % (by number) =52.5] [Solvent: Water]**

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| D | D | D | C | D | Q | D | E | D | G | D | H | D | I | D | L | D | K | D | M |
| D | F | D | P | D | S | D | T | D | W | D | Y | D | V | D | A | D | R | D | N |

**40 α-AA PPC-5 [CYSTEINE rich, % (by number) =52.5] [Solvent: Water]**

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C | C | C | Q | C | E | C | G | C | H | C | I | C | L | C | K | C | M | C | F |
| C | P | C | S | C | T | C | W | C | Y | C | V | C | A | C | R | C | N | C | D |

**40 α-AA PPC-6 [GLUTAMINE rich, % (by number) =52.5] [Solvent: Water]**

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q | Q | Q | E | Q | G | Q | H | Q | I | Q | L | Q | K | Q | M | Q | F | Q | P |
| Q | S | Q | T | Q | W | Q | Y | Q | V | Q | A | Q | R | Q | N | Q | D | Q | C |

**40 α-AA PPC-7 [GLUTAMIC ACID rich, % (by number) =52.5] [Solvent: Water]**

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| E | E | E | G | E | H | E | I | E | L | E | K | E | M | E | F | E | P | E | S |
| E | T | E | W | E | Y | E | V | E | A | E | R | E | N | E | D | E | C | E | Q |

**40 α-AA PPC-8 [GLYCINE rich, % (by number) =52.5] [Solvent: Water]**

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| G | G | G | H | G | I | G | L | G | K | G | M | G | F | G | P | G | S | G | T |
| G | W | G | Y | G | V | G | A | G | R | G | N | G | D | G | C | G | Q | G | E |

**40 α-AA PPC-9 [HISTIDINE rich, % (by number) =52.5] [Solvent: Ethanol]**

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| H | H | H | I | H | L | H | K | H | M | H | F | H | P | H | S | H | T | H | W |
| H | Y | H | V | H | A | H | R | H | N | H | D | H | C | H | Q | H | E | H | G |

**40 α-AA PPC-10 [ISOLEUCINE rich, % (by number) =52.5] [Solvent: Ethanol]**

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| I | I | I | L | I | K | I | M | I | F | I | P | I | S | I | T | I | W | I | Y |
| I | V | I | A | I | R | I | N | I | D | I | C | I | Q | I | E | I | G | I | H |

**40 α-AA PPC-11 [LEUCINE rich, % (by number) =52.5] [Solvent: Ethanol]**

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| L | L | L | K | L | M | L | F | L | P | L | S | L | T | L | W | L | Y | L | V |
| L | A | L | R | L | N | L | D | L | C | L | Q | L | E | L | G | L | H | L | I |

**40 α-AA PPC-12 [ISOLEUCINE rich, % (by number) =52.5] [Solvent: Ethanol]**

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| K | K | K | M | K | F | K | P | K | S | K | T | K | W | K | Y | K | V | K | A |
| K | R | K | N | K | D | K | C | K | Q | K | E | K | G | K | H | K | I | K | L |

**40 α-AA PPC-13 [METHIONINE rich, % (by number) =52.5] [Solvent: Ethanol]**

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| M | M | M | F | M | P | M | S | M | T | M | W | M | Y | M | V | M | A | M | R |
| M | N | M | D | M | C | M | Q | M | E | M | G | M | H | M | I | M | L | M | K |

**40 α-AA PPC-14 [PHENYL ALANINE rich, % (by number) =52.5] [Solvent: Ethanol]**

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| F | F | F | P | F | S | F | T | F | W | F | Y | F | V | F | A | F | R | F | N |
| F | D | F | C | F | Q | F | E | F | G | F | H | F | I | F | L | F | K | F | M |

**40 α-AA PPC-15 [PROLINE rich, % (by number) =52.5] [Solvent: Ethanol]**

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| P | P | P | S | P | T | P | W | P | Y | P | V | P | A | P | R | P | N | P | D |
| P | C | P | Q | P | E | P | G | P | H | P | I | P | L | P | K | P | M | P | F |

**40 α-AA PPC-16 [SERINE rich, % (by number) =52.5] [Solvent: Water]**

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S | S | S | T | S | W | S | Y | S | V | S | A | S | R | S | N | S | D | S | C |
| S | Q | S | E | S | G | S | H | S | I | S | L | S | K | S | M | S | F | S | P |

**40 α-AA PPC-17 [THREONINE rich, % (by number) =52.5] [Solvent: Ethanol]**

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| T | T | T | W | T | Y | T | V | T | A | T | R | T | N | T | D | T | C | T | Q |
| T | E | T | G | T | H | T | I | T | L | T | K | T | M | T | F | T | P | T | S |

**40 α-AA PPC-18 [TRYPTOPHAN rich, % (by number) =52.5] [Solvent: Ethanol]**

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| W | W | W | Y | W | V | W | A | W | R | W | N | W | D | W | C | W | Q | W | E |
| W | G | W | H | W | I | W | L | W | K | W | M | W | F | W | P | W | S | W | T |

**40 α-AA PPC-19 [TYROSINE rich, % (by number) =52.5] [Solvent: Ethanol]**

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Y | Y | Y | V | Y | A | Y | R | Y | N | Y | D | Y | C | Y | Q | Y | E | Y | G |
| Y | H | Y | I | Y | L | Y | K | Y | M | Y | F | Y | P | Y | S | Y | T | Y | W |

**40 α-AA PPC-20 [VALINE rich, % (by number) =52.5] [Solvent: Ethanol]**

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| V | V | V | A | V | R | V | N | V | D | V | C | V | Q | V | E | V | G | V | H |
| V | I | V | L | V | K | V | M | V | F | V | P | V | S | V | T | V | W | V | Y |

1. This typical protein has sequence of many α-amino acids where the long PPC begins with specific α-amino acid only (eg: Alanine in PPC-1).
2. The polypeptide chain may begin with N-terminal or C-terminal based on whether free NH2 or free COOH part is left with the first α-amino acid (eg: alanine).
3. I always propose that, it is better to use only one possible codon to code any given α-amino acid (eg: GCC = Alanine)
4. In this long PPC, there exists every possible pair of α-AA moieties so that this typical protein (*if 3D-pattern is clearly known) can fight against all types of viruses in spite of mutations they undergo during their transformation.

[**Note:** Reading from top to bottom, then moving towards right and again reading in same pattern. Each vertical column has 40 codons]

This typical anviunpro-2040RC must be tested on any R&D platform taking all possible viruses right from simple cold to present Covid-19 (*all variants). The results alone indicate its functionality or effectiveness. As growth of any virus follows 1st order kinetics with specific half-life (t0.5), addition of this anviunpro-2040RC must show a gradual or even a rapid decline in the rate of multiplication of viral cells which can be studied as d[N]/dt versus Time (t) graph

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| GCC | CGU | AAU | GAC | UGC | CAG | GAG | GGC | CAU | AUU | CUA | AAG | AUG | UUC | CCU |
| GCU | CGC | AAU | GAC | UGC | CAG | GAG | GGA | CAU | AUC | CUC | AAA | AUG | UUU | CCA |
| GCA | CGA | AAC | GAC | UGC | CAG | GAG | GGG | CAC | AUA | CUG | AAG | AUG | UUC | CCG |
| CGU | AAU | GAU | UGU | CGG | GAG | GGG | CAU | AUU | CUU | AAG | AUG | UUC | CCG | CAG |
| GCC | CGG | AAC | GAC | UGC | CAG | GAG | GGG | CAC | AUA | CUG | AAG | AUG | UUC | CCG |
| AAU | GAU | UGU | CAA | GAA | GGG | CAU | AUU | CUU | AAG | AUG | UUC | CCG | CAG | ACC |
| GCC | CGU | AAC | GAC | UGC | CAG | GAG | GGG | CAC | AUA | CUG | AAG | AUG | UUC | CCG |
| GAU | UGU | CAA | GAA | GGU | CAU | AUU | CUU | AAG | AUG | UUC | CCG | CAG | ACC | UGG |
| GCC | CGU | AAC | GAC | UGC | CAG | GAG | GGG | CAC | AUA | CUG | AAG | AUG | UUC | CCG |
| UGU | CAA | GAA | GGU | CAU | AUU | CUU | AAG | AUG | UUC | CCG | CAG | ACC | UGG | UAU |
| GCC | CGU | AAC | GAC | UGC | CAG | GAG | GGG | CAC | AUA | CUG | AAG | AUG | UUC | CCG |
| CAA | GAA | GGU | CAU | AUU | CUU | AAG | AUG | UUC | CCG | CAG | ACC | UGG | UAU | GUG |
| GCC | CGU | AAC | GAC | UGC | CAG | GAG | GGG | CAC | AUA | CUG | AAG | AUG | UUC | CCG |
| GAA | GGU | CAU | AUU | CUU | AAG | AUG | UUC | CCG | AGU | ACC | UGG | UAU | GUG | GCA |
| GCC | CGU | AAC | GAC | UGC | CAG | GAG | GGG | CAC | AUA | CUG | AAG | AUG | UUC | CCG |
| GGU | CAU | AUU | CUU | AAA | AUG | UUC | CCG | AGU | ACU | UGG | UAU | GUG | GCA | CGU |
| GCC | CGU | AAC | GAC | UGC | CAG | GAG | GGG | CAC | AUA | CUG | AAG | AUG | UUC | CCG |
| CAU | AUU | CUU | AAA | AUG | UUC | CCG | AGU | ACU | UAG | UAU | GUG | GCA | CGU | AAC |
| GCC | CGU | AAC | GAC | UGC | CAG | GAG | GGG | CAC | AUA | CUG | AAG | AUG | UUC | CCG |
| AUU | CUU | AAA | AUG | UUU | CCG | AGU | ACU | UAG | UAC | GUG | GCA | CGU | AAC | GAC |
| GCC | CGU | AAC | GAC | UGC | CAG | GAG | GGG | CAC | AUA | CUG | AAG | AUG | UUC | CCG |
| CUU | AAA | AUG | UUU | CCC | AGU | ACU | UAG | UAC | GUG | GCA | CGU | AAC | GAC | UGC |
| GCC | CGU | AAC | GAC | UGC | CAG | GAG | GGG | CAC | AUA | CUG | AAG | AUG | UUC | CCG |
| AAA | AUG | UUU | CCC | AGU | ACU | UAG | UAC | GUG | GCA | CGU | AAC | GAC | UGC | CAG |
| GCC | CGU | AAC | GAC | UGC | CAG | GAG | GGG | CAC | AUA | CUG | AAG | AUG | UUC | CCG |
| AUG | UUU | CCC | AGU | ACA | UAG | UAC | GUG | GCA | CGU | AAC | GAC | UGC | CAG | GAG |
| GCC | CGU | AAC | GAC | UGC | CAG | GAG | GGG | CAC | AUA | CUG | AAG | AUG | UUC | CCG |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| UUU | CCC | AGU | ACA | UGG | UAC | GUG | GCA | CGU | AAC | GAC | UGC | CAG | GAG | GGG |
| GCC | CGU | AAC | GAC | UGC | CAG | GAG | GGG | CAC | AUA | CUG | AAG | AUG | UUC | CCG |
| CCC | AGU | ACA | UGG | UAU | GUG | GCA | CGU | AAC | GAC | UGC | CAG | GAG | GGG | CAC |
| GCC | CGU | AAC | GAC | UGC | CAG | GAG | GGG | CAC | AUA | CUG | AAG | AUG | UUC | CCG |
| AGU | ACA | UGG | UAU | GUG | GCA | CGU | AAC | GAC | UGC | CAG | GAG | GGG | CAC | AUA |
| GCC | CGU | AAC | GAC | UGC | CAG | GAG | GGG | CAC | AUA | CUG | AAG | AUG | UUC | CCG |
| ACA | UGG | UAU | GUG | GCC | CGU | AAC | GAC | UGC | CAA | GAG | GGG | CAC | AUA | CUG |
| GCC | CGU | AAC | GAC | UGC | CAG | GAG | GGG | CAC | AUA | CUG | AAG | AUG | UUC | CCG |
| UGG | UAU | GUG | GCC | CGU | AAC | GAC | UGC | CAA | GGG | GGG | CAC | AUA | CUG | AAG |
| GCC | CGU | AAC | GAC | UGC | CAG | GAG | GGG | CAC | AUA | CUG | AAG | AUG | UUC | CCG |
| UAU | GUG | GCC | CGU | AAU | GAC | UGC | CAA | GGG | GCG | CAC | AUA | CUG | AAG | AUG |
| GCC | CGU | AAC | GAC | UGC | CAG | GAG | GGG | CAC | AUA | CUG | AAG | AUG | UUC | CCG |
| GUG | GCC | CGU | AAU | GAC | UGC | CAA | GAA | GCG | CAC | AUA | CUG | AAG | AUG | UUC |

| PPC-16 | PPC-17 | PPC-18 | PPC-19 | PPC-20 |
|---|---|---|---|---|
| AGU | ACG | UGG | UAU | GUC |
| AGC | ACC | UGG | UAC | GUA |
| AGU | ACU | UGG | UAU | GUG |
| ACU | UGG | UAU | GUG | GCA |
| AGU | ACU | UGG | UAU | GUG |
| UGG | UAU | GUG | GCA | CGU |
| AGU | ACU | UGG | UAU | GUG |
| UAU | GUG | GCA | CGU | AAC |
| AGU | ACU | UGG | UAU | GUG |
| GUG | GCA | CGU | AAC | GAC |
| AGU | ACU | UGG | UAU | GUG |
| GCA | CGU | AAC | GAC | UGC |
| AGU | ACU | UGG | UAU | GUG |
| CGU | AAC | GAC | UGC | CAG |
| AGU | ACU | UGG | UAU | GUG |
| AAC | GAC | UGC | CAG | GAG |
| AGU | ACU | UGG | UAU | GUG |
| GAC | UGC | CAG | GAG | GGG |
| AGU | ACU | UGG | UAU | GUG |
| UGC | CAG | GAG | GGG | CAC |
| AGU | ACU | UGG | UAU | GUG |
| CAG | GAG | GGG | CAC | AUA |
| AGU | ACU | UGG | UAU | GUG |

**Disclaimer**

**[1]** **This antiviunpro-2040[RC] is purely hypothetical concept and my brain child. I did not know whether similar concept was already existed elsewhere (or) not.**

**[2]** **I opine that, this antiviunpro-2040[RC] if synthesized in any laboratory may be tested on different viral cells to come to anyconclusion.**

**[3]** **I will be so happy if any Nobel laureate gives a good critic (positive or negative feedback) on this article which itself shallbe taken as if I won the Nobel Prize.**

**[4]** **A similar article was already published by me in IJSER (2020) for which I received the certificate of publication too.**

**[5]** **This article does not have any patent rights (*I tried but patent rights shall not be given to articles, as what they said).**

**[6]** **I sent its earlier version (same concept) to many R&Dplatforms across the globe (*2020).**

**Place: Chennai/INDIA** **Rama Chandran.V.S**
**Date: 07-10-2021** **[+91-70340-33-703]**

| | | | | |
|---|---|---|---|---|
| GAG | GGG | CAC | AUA | CUG |
| AGU | ACU | UGG | UAU | GUG |
| GG | CAC | AUA | CUG | AAG |
| AGU | ACU | UGG | UAU | GUG |
| CAC | AUA | CUG | AAG | AUG |
| AGU | ACU | UGG | UAU | GUG |
| AUA | CUG | AAG | AUG | UUC |
| AGU | ACU | UGG | UAU | GUG |
| UG | AAG | AUG | UUC | CCG |
| AGU | ACU | UGG | UAU | GUG |
| AAG | AUG | UUC | CCG | AGU |
| AGU | ACU | UGG | UAU | GUG |
| AUG | UUC | CCG | AGU | ACU |
| AGU | ACU | UGG | UAU | GUG |
| UUC | CCG | AGU | ACU | UGG |
| AGU | ACU | UGG | UAU | GUG |
| CCG | AGU | ACU | UGG | UAU |

**Polypeptide Chains [40 α-AA units]-Interaction Strengths [*Assumptions]**

## REFREENCE

[1] A simple dipeptide has two possible structures based on the amino acid which contributedOH part [from COOH] (or) H part [from $NH_2$].
eg: Glycine + Alanine → Glycylalanine [1] + Alanylglycine [2] where in [1], $NH_2$ of

**Gly** is free while in [2], $NH_2$ of **Ala** is free. So,has structural formula as : $H_2N$-$CH_2$-CO-NH-*$\mathbf{C}$H(Me)-COOH [N to C terminal]has structural formula as: $H_2N$-*$\mathbf{C}$H(Me)-CO-NH-$CH_2$-COOH [N to C terminal]

[2] In both [1] and [2], C* = stereogenic centre (or chiral carbon) and both are optically active.

[3] Secondly, it is [D] or [L] isomer that plays another role. As L-isomer is the natural one inmost of cases, problem of [D]-based isomer may be ruled out unless amino acid exists asreceimic form [dℓ-pair].

[4] In case of a polypeptide chain, the substituent [say G] on C bearing $NH_2$ and also COOH may orient itself in space in such a manner so as to minimize torsional type strain (or) steric repulsion type based strain, if any hence such groups are usually protruded from the chain. If this G has hydrophobic part (eg: Isopropyl in case of **Valine**), it prefers non-aqueous systems to develop van der Waal based (or) Dispersion based intermolecular attractions/repulsions based on whether they exist in eclipsed or staggered conformation.

[5] When we observe each of above 20 polypeptide chains, in each chain, only one specific amino acid is found rich (by number) which may even by mass (% by mass too). Since hydrophobic based side chain (substituent = G) interacts less with aqueous system unless stabilized by H-bonding, metal ions such as $Zn^{(II)}$, $Co^{(III)}$, $Fe^{(II)}$, $Mo^{(III)}$ etc.,

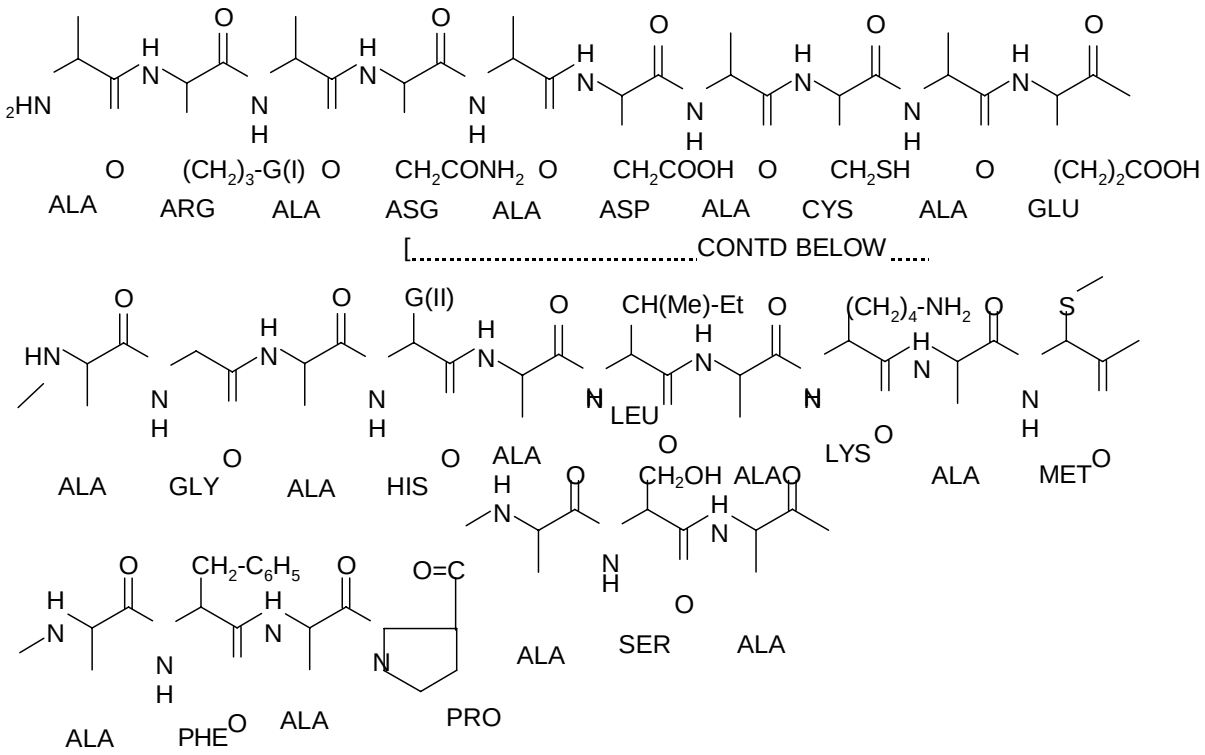
[6] When hydrophobic rich polypeptide chain [say X] happens to interact with:
hydrophilic rich polypeptide chain [Y] => [X] -------[Y] interaction is much weaker than [Y] ----------[Water] interaction so, [Y] prefers to be in soluble state than [X]
hydrophobic rich polypeptide chain [say Z] => [X] ----- [Z] interaction is much stronger than [X] -----[Water] (or)[Z] ---------- [Water] hence such chains prefer to be away from $H_2O$ (polar) ends so remains sparingly soluble state.

[7] When I analyzed covid-19 (sars-cov-19, virus), I found it as hydrophobic rich than other so, action of virus on any specific cell (or organ) prefers hydrophobic rich protein part of such organ so that, its binding ability is enhanced to a greater extent hence causing a great trouble in breathing (eg: Lung infection), digestion (eg: Liver infection) etc.,

[8] Out of 20 such PPC (*polypeptide chain), I assumed that those having Cysteine, Arginine, Histidine, Serine, Glycine, Aspartic acid, Glutamic acid and Threonine **rich** based alone ashydrophilic based and rest, hydrophobic (*relatively more). So, in case, if all these twenty PPC happen to exist as mixture in (**50% (v/v)** Ethanol (aqueous) solution, I opine that, only these 8 PPC alone likely to form $4^0$ (quaternary) globular protein (*$\mathbf{320}$ AA moieties). The other 12 PPC may give β-pleated (*fibrous based) protein.

[9] As this mixture is **hydrophobic rich**, it may interact with viral protein to cause a greater coagulation since **hydrophilic** based protein protect **hydrophobic** based from coagulation.




## Final Word

***This hypothesis may not necessarily come true on practical platform due to many and unexpected traits or hurdles. However, my idea may allow other legends in this field to try in a different way to test it or even synthesize it. As per my little knowledge, synthesis of anypolypeptide chain of length more than 50 α-AA moieties has not been achieved yet, if any***

***well-known R&D tries to synthesize 20 such separate polypeptide chains (as per specific type of sequence which I shown) and later allow all those to form a complex protein. In such case my view of eradicating any sort of virus may be possible.***

***I welcome critics from every possible corner across this globe……***

***Thank you on and all who read this article……***

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