Amino Acid Writeup

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1 Aspartic Acid

Aspartic Acid (standar codons GAC and GAU) is a non-essential amino acid [2].[1] It is polar, which means it is hydrophopbic and generally ends up on the surface of proteins. Aspartic Acid is small compared to other amino acids.

It is one of two negatively charged amino acids, so its use in protein structure stems from the ability of the carbolyxate ($RCOO^-$) to bind with positively charged amino acids. This particular binding forms hydrogen bonds and keeps the protein's structure stable.

GAC and GAU

2 Phenylalanine

The chemical formula for Phenylalaine is $C_9H_{11}NO_2$. stardard codons are UUC and UUU [1]. It is extremely hydrophobic, with

is an essential amino acid [2], meaning it is not synthersized internally and must be consumed.

References

[1] Betts, M. J., and Russell, R. B. Amino acid properties and consequences of substitutions.

[2] Young, V. R. Adult amino acid requirements: the case for a major revision in current recommendations. *The Journal of nutrition 124*, 8 Suppl (1994), 1517S–1523S.

[1] A highly misleading attribute name.