

School of Basic & Applied Sciences

Course Code : BSCC3001

Course Name: BIOMOLECULES

C- terminal End group analysis of Amino acids & Peptides

The logo of Galgotias University is a stylized 'G' composed of several overlapping, curved bands in shades of yellow, orange, and blue, set against a light pink circular background.

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Name of the Faculty: Dr. Anjali Gupta

Program Name: B.Sc. (H) Chemistry

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Prerequisites

Knowledge of concepts of organic chemistry

Properties of peptide bond

Enzymatic activity

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RECAP

Definition of amino acids

Classification of amino acids

Zwitter ion

pKa values

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Learning Outcomes

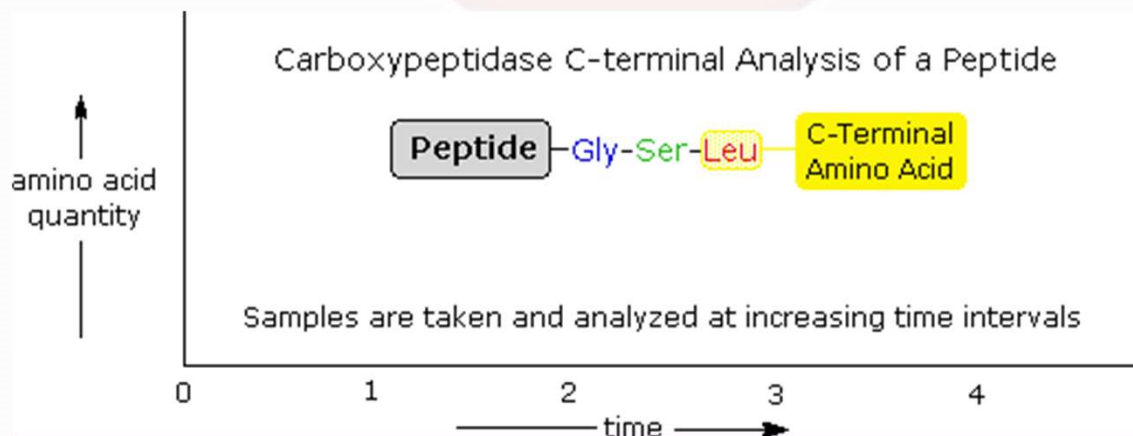
End term analysis in amino acids

Determination of C-terminal

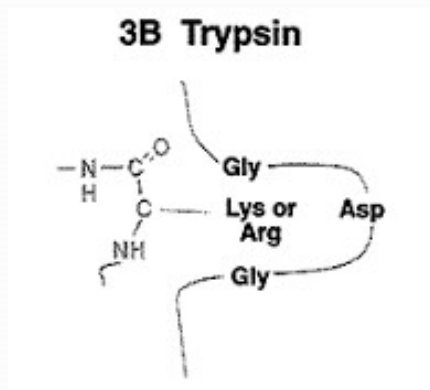
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Addition of Carboxypeptidases

Enzymes which selectively cleave amino acids from the C-terminal. A peptide having a C-terminal sequence: ~Gly-Ser-Leu is subjected to carboxypeptidase cleavage



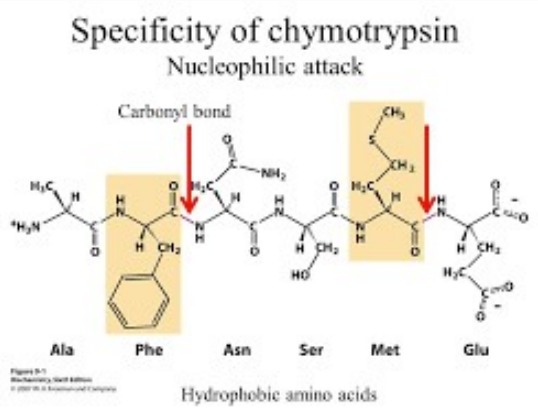
Addition of Trypsin



Enzymatic cleavage of Carboxyl Side of
Basic Amino Acids
e.g. Lys & Arg

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Addition of Chymotrypsin

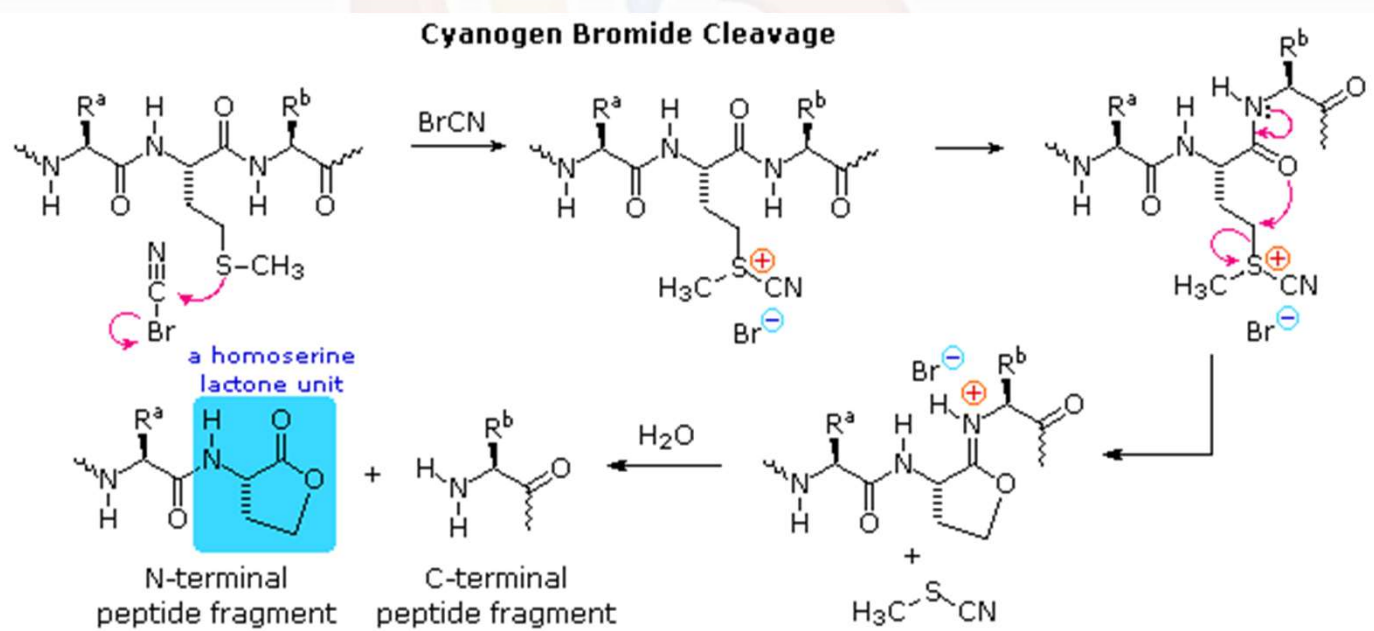


Enzymatic cleavage of Carboxyl Side of Aryl Amino Acids
e.g. Phe, Tyr & Trp

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Addition of Cyanogen Bromide

Cleavage at Carboxyl Side of Methionine



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References

1. <https://www2.chemistry.msu.edu/faculty/reusch/VirtTxtJml/protein2.htm>
2. <https://en.wikipedia.org/wiki/Trypsin>
3. <https://en.wikipedia.org/wiki/ChymoTrypsin/>.

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THANKYOU

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