C- terminal End group analysis of Amino acids & Peptides

Prerequisites

Knowledge of concepts of organic chemistry

Properties of peptide bond

Enzymatic activity

RECAP

Definition of amino acids

Classification of amino acids

Zwitter ion

pKa values

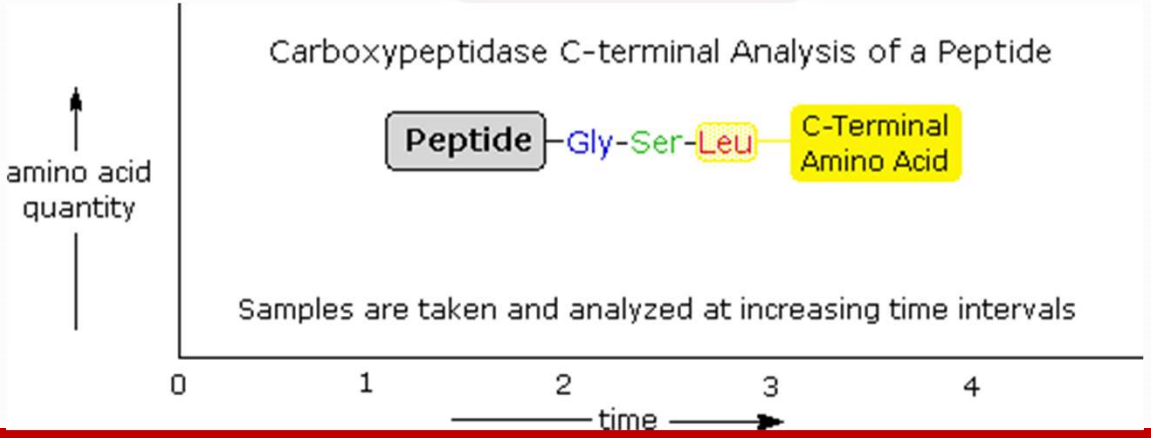
Learning Outcomes

End term analysis in amino acids

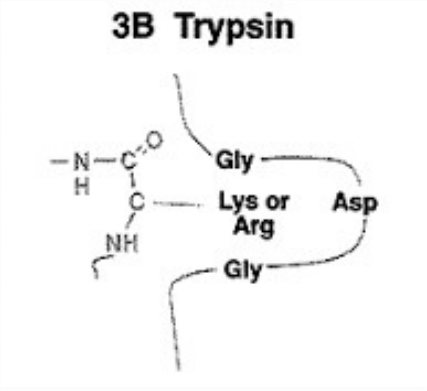
Determination of C-terminal

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



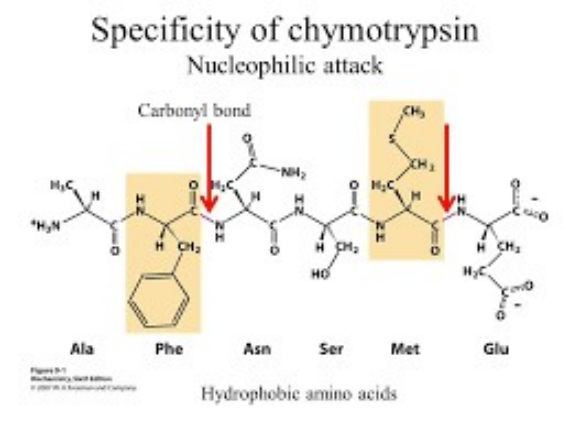
Addition of Trypsin



Enzymatic cleavage of Carboxyl Side of Basic Amino Acids

e.g. Lys & Arg

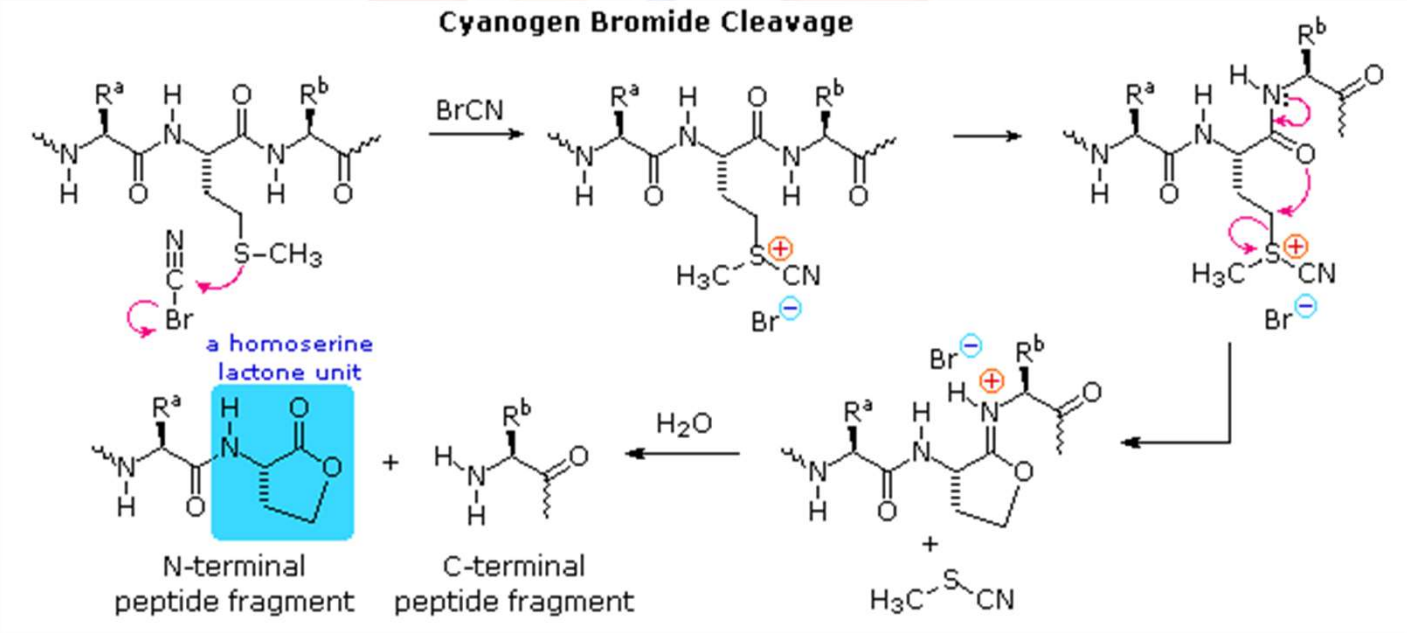
Addition of Chymotrypsin



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

Addition of Cyanogen Bromide

Cleavage at Carboxyl Side of Methionine



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/**.

THANKYOU