

THE EDMAN DEGRADATION METHOD INVOLVES SEQUENTIAL CLEAVAGE OF AMINO ACIDS FROM THE N-TERMINAL OF A PEPTIDE.

This is a three-step procedure consisting of:

- 1. The coupling of PITC to a peptide or protein.
- **2.** Cleavage of the amino acids (via cyclization typically in trifluoroacetic acid).
- **3.** Conversion of the resulting thiazolinone derivative, in aqueous acid, to its more stable isomer the PTH amino acid.

The sequence of amino acids can then be identified by liquid chromatography (LC).

Benefits:

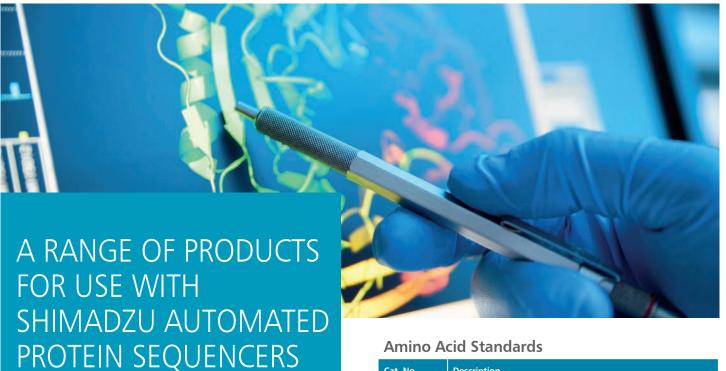
Guaranteed N-terminal sequence of proteins

SEQUENCING?

- No sample pre-treatment required
- Differentiation of isobaric amino acids (e.g. Leucine and Isoleucine)
- Identification possible even from unknown proteins not registered in databases
- Four to six peptides can be analysed simultaneously







PRODUCTS AVAILABLE INCLUDE:

- **REAGENTS**
- **GLASS FIBRE DISCS**
- **SOLVENTS AND ELUENTS**

Shimadzu Reagents

Cat. No.	Description
207-20031	Trifluoroacetic Acid
052-09041	Ethyl Acetate
161-27341	5% Phenyl Isothiocyanate n-Heptane
200-20021	12% Trimethylamine Solution
033-24371	1-Chlorobutane
163-28261	PTH-amino Acids Mobile Phase A
160-28271	PTH-amino Acids Mobile Phase B
018-26041	37% Acetonitrile Solution
204-20041	25% Trifluoroacetic Acid
202-20721	25% Trifluoroacetic Acid Solution
132-18821	30%N-Methylpiperidine Solution
168-27351	PTH-Amino Acids Mobile Phase
072-06461	Glass Fibre Disc, TFA Treated
014-12471	Acetonitrile
084-05501	Heptane

Amino Acid Standards

Cat. No.	Description
161-08661	PTH-DL-α-alanine Standard
165-08821	PTH-DL-2-aminoisobutyric Acid Standard
163-08981	PTH-L-arginine Hydrochloride Standard
162-08711	PTH-L-aspartic Acid Standard
169-13591	PTH-S-carboxymethylcysteine Standard
168-08811	PTH-L-citrulline Standard
164-09011	PTH-L-cysteic Acid Potassium Salt Standard
166-08851	PTH-L-glutamic Acid Standard
165-08701	PTH-L-glutamine Standard
168-08671	PTH-glycine Standard
168-08791	PTH-L-histidine Hydrochloride Standard
164-08771	PTH-DL-isoleucine Standard
165-08681	PTH-L-Leucine Standard
161-08781	PTH-L-lysine Standard
161-08801	PTH-DL-Methionine Standard
169-08721	PTH-DL-norleucine Standard
166-08731	PTH-DL-norvaline Standard
163-08741	PTH-L-Phenylalanine Standard
160-08751	PTH-L-Proline Standard
169-08961	PTH-DL-serine Standard
166-08971	PTH-DL-threonine Standard
167-09001	PTH-δ-threonine Standard
160-08991	PTH-DL-tryptophan Standard
162-08691	PTH-L-tyrosine Standard
167-08761	PTH-DL-Valine Standard

Also available:

Liquid Chromatography columns for PTC-labelling, Gradient Elution & Isocratic methods.

Find out more at www.alphalabs.co.uk/protein-sequencing

