An Internal Communication
of Applications and Techniques

Waters
Lab Highlights PROTEINS
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HUMAN GROWTH HORMONE (HGH) CHARACTERIZATION USING PROTEIN COLUMNS

Human growth hormone (HGH) is especially important today with possibility of production by biogenic engineering. Naturally recoverable from the pituitary gland of human cadavers, HGH finds particular therapeutic success in the treatment of growth disorders such as dwarfism.

Biosynthesis of HGH offers a long sought after source of large amounts of this hormone, and HPLC can be used to rapidly characterize and/or purify the synthetic product.

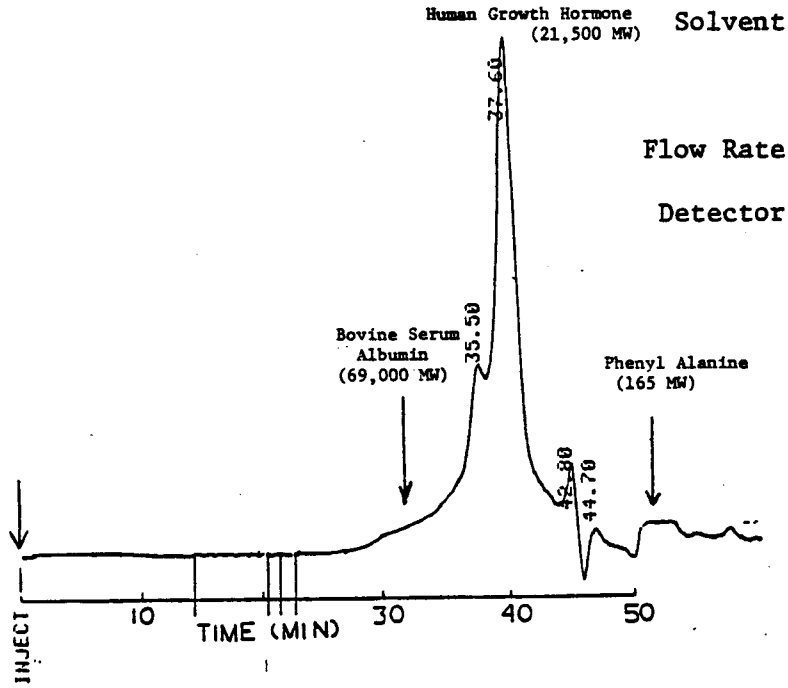
The chromatogram below shows a size separation of HGH on the Protein I series columns. In the figure below, flow rate was 0.5 ml/min. and the elution volumes of Bovine Serum Albumin (BSA) and Phenyl Alanine are indicated on the chromatogram relative to HGH.

Columns: Protein Analysis (X2)

Solvent: 0.1 M TRIS
0.1 M Na_3PO_4
pH 7.0

Flow Rate: 0.5 ml/min.

Detector: Waters 440, 280 nm, .05 AUFS



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