with a low threshold, causing the first-type effects not related to pain, electively sensitive to metabolic doses of bradykinin, have been indicated as K-receptors; those with high threshold, causing the second-type responses strictly related to pain, sensitive to a great number of substances and showing properties characteristic of noci-algoceptors, have been indicated as P-receptors.

## PRIMARY STRUCTURE OF PIG PANCREATIC KALLIKREIN B

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Pig pancreatic kallikreins A and B are glycoproteins that differ only in that the B form contains a larger amount of carbohydrate. Kallikrein B (molecular weight of the protein part, 25 300; average total molecular weight, 29 000) consists of two polypeptide chains. Five tryptic peptides have been isolated from the  $\alpha$ -chain (80 amino acids) and the expected five cyanogen bromide peptides from the  $\beta$ -chain (149) amino acids) of reduced and carboxymethylated kallikrein. The two larger cyanogen bromide fragments have been further degraded with trypsin to obtain peptides suitable for sequenator analysis. Difficulties in the purification of several of the peptides arising from their insolubility or tendency to aggregation have been overcome by chromatography on SP-Sephadex with an ionic strenght gradient (NaCl or triethylamine) in slightly buffered 50% acetic acid. Such a system might be of general usefulness in similar situations. The results from degradation studies, amino acid and sequenator analyses allowed alignment of the peptides without the need for additional information. The work is nearing completion, more than half of the kallikrein sequence having been determined till now. There is evident already a large extent of homology with other pancreatic serine proteinases.