The Development of a DesArg^{9}Bradykinin Radioimmunoassay

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SUMMARY

Antibodies for a DesArg^{9}Bradykinin radioimmunoassay were raised in rabbits. The immunogen used was DesArg^{9}-Bradykinin conjugated with ovalbumin and /or porcine thyroglobulin. Antisera were screened with ^{125}I-Tyr^{1}Kallidin, ^{125}I-Tyr^{5}Bradykinin, and ^{125}I-Tyr^{8}Bradykinin, which were treated with carboxypeptidase B to remove the C-terminal arginine. Five of the six rabbits produced antisera capable of 33% of added radioactivity when diluted 1:200 or more. Dilutions binding 30-50% of added radioactivity were used to evaluate the response to the addition of unlabeled antigen. The most specific antisera was obtained from a rabbit immunized with DesArg^{9}Bradykinin conjugated with ovalbumin by tolylene-2,4-diisocyanate, using carboxypeptidase B treated ^{125}I-Tyr^{8}Bradykinin as the radioactive antigen. With this combination, inhibition of 50% of radioactive antigen was produced with unlabeled DesArg^{9}Bradykinin at a concentration of 0.57 ng/ml.

TABLE OF CONTENTS