

E119**Hinnavin I, Antibacterial Peptide from Larval Haemolymph of Cabbage Butterfly, *Pieris rapae***

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We have previously shown that larvae of cabbage butterfly *Pieris rapae* have a humoral antibacterial activity which was induced by primary infections with viable *Escherichia coli* K-12. Antibacterial protein from these immune haemolymph has purified with reversed phase FPLC in final step at acetonitrile gradient 30.1-30.7%. A novel antibacterial peptide was named as Hinnavin I. To elucidate the primary structure of Hinnavin I, amino acid sequences of this peptide were determined by N-terminal sequencing techniques. In addition, amino acid composition was analyzed and molecular weight was estimated by ESI mass spectrum. We will discuss this peptide.

E120**Autoradiographic Localization of Atrial Natriuretic Peptide Receptors in the Freshwater Turtle, *Amyda japonica***

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The localization of binding sites for atrial natriuretic peptide (ANP) was investigated in various tissues of the freshwater turtle, *Amyda japonica*, by *in vitro* autoradiography using ^{125}I -atriopeptin III (AP III) as labeled ligand. ^{125}I -AP III binding sites were located in the glomerular apparatus of the kidney, the cortex of the adrenal gland, the epithelium of the epididymis, the tubuli of the testis, and the mucosal layers of the stomach and intestine. In the presence of 1 μM unlabeled AP III the ^{125}I -AP III bindings in all of these structures were completely displaced. While 2 μM of C-ANP, a specific ligand of ANP clearance receptor, did not displace the binding of ^{125}I -AP III to any structures except for the mucosal layers of the stomach and intestine. These findings suggest not only the existence of the biological receptor for ANP in various tissues but also the differential distribution for subtypes of the specific ANP receptor in the freshwater turtle.