

### **3-2-2. Localization and Process Pathway of FMRF-amide in the Central Nervous System of Silk Worm, *Bombyx mori***

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Specific neurons in the insect nervous system secrete peptides related to hormones found in vertebrates and other invertebrates groups. These insect neuropeptides have been detected with immunoassay, bioassays, and biochemical methods. Also endocrine cells in the midgut of insects including mosquitoes, contain similar peptides. This distribution of peptidergic cell constitutes a brain-midgut neuroendocrine axis in insect.

FMRFamide(phenylalanine-methionine-arginine-phenylalanine-amide) is a cardioexcitatory neuropeptide in molluscs ; related peptides have been identified in the nervous system and gut of a variety of animals including vertebrates.

In this study, immunocytochemical identification of FMRFamide producing neuron were detected in the central nervous system of silk worm, *Bombyx mori*.