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**Molecular cloning of a cDNA encoding a serine protease from the firefly, *Pyrocoelia rufa***

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Serine proteases are major insect gut enzymes involved in digestion of dietary proteins. Here, we describe the molecular cloning and characterization of a cDNA encoding a putative member of the serine protease gene family from a cDNA library of the firefly, *Pyrocoelia rufa*. Sequence analysis of the cDNA encoding the serine protease of *P. rufa* revealed that the 771 bp cDNA has an open reading frame of 257 amino acid residues with a molecular mass of approximately 25.7 kDa. The deduced protein sequence of the serine protease gene of *P. rufa* was aligned to the insect serine proteases. The protein sequence of *P. rufa* serine protease shows the six-conserved cysteine residues to form the three-cysteine bonds typically present in invertebrate serine proteases. Northern blot analysis revealed that the *P. rufa* serine protease gene is expressed in mid gut.