

# **Purification and Cloning of Male Specific Protein (MSP) from Wax Moth, *Galleria mellonella* L.**

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A male specific protein (MSP) is a soluble protein which is accumulated in high amounts in the haemolymph and other organs of adult male wax moth. The MSP was purified from the body of adult male wax moth by gel filtration and reversed phase column chromatography which method is slightly modified from the old strategy used in our previous studies. Several internal amino acid sequences of MSP were obtained by in-gel digestion method using trypsin because of the blocked N-terminal amino acid.

The internal cDNA sequence of MSP was obtained from RT-PCR using degenerate primers designed from the internal amino acid sequences. 5'- and 3'-RACE PCR were used to obtain complete protein coding sequence and untranslated region. The sequence encodes a 239 amino acid polypeptide including a potential 18 amino acid signal peptide. Without the signal peptide, the encoded polypeptide has a theoretical molecular mass of 24,317 Da and a predicted isoelectric point (pI) of 6.15.