Co-expression of Baculoviral FP25 Confers High and Compact Formation of Baculoviral Polyhedrin-induced Inclusion Body in *Escherichia coli*

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The FP25 protein of *Autographa californica*nuclear polyhedrosis virus (AcNPV) was newly achieved to express in *Escherichia coli*, and its role involving in promoting formation of compact inclusion bodies from high-level of heterologous protein production was investigated. When used as a co-expressed partner, FP25 showed a direct influence on highly increase of production of foreign protein (fusion protein of AcNPV polyhedrin (Polh) and green fluorescent protein (GFP)). PAGE analysis showed that FP25 was participated in the inclusion bodies as a component. Electron microscopy confirmed inclusion body formation and additional fibrillar and electron-dense structure within *E. coli* recipient cells because of FP25 involving. Proteolytic degradation using pronase on FP25-associated inclusion bodies revealed an increased defense, and FP25-associated inclusion bodies exhibited similar solubilization property on neutral and alkaline condition as solely formed inclusion bodies from Polh-GFP fusion protein.

Reference

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