The PRIT system

Pharmacia; macplasmid #5

This system involves the fusion of genes to the affinity tail of Protein A, and purification of the fusion protein on IgG sepharose. (Protein A binds strongly to Rabbit IgG and mouse IgG 2a+2b). The vector PRIT 2T allows for temperature-inducible expression of intracellular fusion proteins via the lambda promotor. A temperature shift from 30 degrees C to 42 degrees C results in heat inactivation of the promotor's repressor, allowing initiation of transcription and subsequent protein expression.

The main advantage of this system is the rapid recovery of fusion proteins from crude lysate under conditions that do not denature the fusion protein.