

Crystallization of *PAT* protein with aptamer against *PAT* protein for structural analysis

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Aptamer is oligonucleotide which can bind to specific target such as PAT protein in this research. Aptamer against *PAT* was selected and purified using typical SELEX method. The *PAT*, as target of aptamer, is one of GM crops that confer herbicide resistance. Because of safety awareness of GM crops, GM crops detection is very important in commercial market. Development of GM detection system will be based on not only antibody but also aptamer. Aptamer and *PAT* protein was synthesized to complex form for structural analysis. Complex was screened using crystal vapor diffusion method. The crystal structure would provide detailed analysis of binding and active site of this protein useful for protein-aptamer interaction.